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AESTRACT

This document contains eight background papers developed by staff of the California Commission for the Review of the Master Plan for Higher Education. Papers have the following titles: "Early Studies of Postsecondary Education in California"; "The Demand for Postsecondary Education in California to the Year 2000"; "Financing Postsecondary Education in California"; "What Postsecondary Education Offers in California"; "The Governance of Postsecondary Education in California"; "What is the Private Sector?"; "Who Are the Faculty and Staff of Postsecondary Education in California?"; and "Vocational Education and Employment Training in California." References accompany each paper. (DB)

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BACKGROUND PAPERS
THE MASTER PLAN RENEWED

UNITY, EQUITY, QUALITY, AND EFFICIENCY
IN CALIFORNIA POSTSECONDARY EDUCATION

Commission for the Review of the
Master Plan for Higher Education

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August 31, 1987

This document contains a series of background papers developed by staff for Commission use as it turned its attention from a reassessment of the California Community Colleges (The Challenge of Change) to a review of the structure and function of all postsecondary education in California, public and private.

The Commissioners received and discussed the background papers early in the review process, but did not vote on or approve them. (These background papers were originally compiled and published in draft form in September, 1986.)

The report, The Master Plan Renewed: Unity, Equity, Quality, and Efficiency in California Postsecondary Education, and a series of 16 issue papers (used extensively by the Commission in developing its report) are available as separate documents.

Lee R. Kerschner
Executive Director

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BACKGROUND PAPERS

THE MASTER PLAN RENEWED

UNITY, EQUITY, QUALITY, AND EFFICIENCY IN CALIFORNIA POSTSECONDARY EDUCATION

COMMISSION FOR THE REVIEW OF THE
MASTER PLAN FOR HIGHER EDUCATION

Sacramento, California
August 1987

BACKGROUND PAPERS

THE MASTER PLAN RENEWED

UNITY, EQUITY, QUALITY, AND EFFICIENCY IN CALIFORNIA POSTSECONDARY EDUCATION

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BACKGROUND PAPER NO. 1:

EARLY STUDIES OF POSTSECONDARY EDUCATION IN CALIFORNIA; THE 1960 MASTER PLAN; AND SUBSEQUENT STATEWIDE STUDIES.

Introduction

Public postsecondary education in California began with the opening of the California State Normal School (now California State University, San Jose) in 1862, the creation of the University of California in the Organic Act of 1868, and the establishment of the first Junior College program in Fresno in 1910. By 1920, there were seven normal schools, and the Legislature decided to abolish their local governing boards, reorganize them under the State Board of Education and the Superintendent of Public Instruction, and rename them teachers' colleges. In 1935, the Legislature acted to change their names to State Colleges and formally authorize the expansion of their curriculum beyond teacher education into the liberal arts and sciences and various technical fields, including agriculture.

In the meantime, the University of California, which from its founding has enjoyed unique status as a public trust governed by a Board of Regents "not subject to the Governor or Legislature except as to extent of financial support" (Coons, p.23), had grown beyond its original campus in Berkeley to include campuses in San Francisco and Davis. In 1919, it took over the Los Angeles Normal School as its fourth campus. During this period, the Junior Colleges continued to evolve as two-year academic and vocational programs offered by public school districts. In 1921, the Legislature authorized the creation of separate junior college districts, but throughout the first half of the century the majority of Junior Colleges continued to be operated by high school and unified school districts.

The University of Santa Clara and the University of the Pacific, which were established in 1851, and Mills College established in 1852, were the first of the state's many independent (private) institutions of postsecondary education. Unlike their sister institutions in the eastern states, these colleges and universities grew up in the shadow of a strong and ambitious collection of public institutions. Yet among them were colleges and universities, large and small, that quickly gained national and international recognition for their academic accomplishments.

The Earliest Studies

From the beginning, there was a strong interest in the statewide development of postsecondary education on the part of state legislators as well as educators. Shortly before the end of the last century, the Legislature established a 45-member California Education Commission made up of leading educators and prominent citizens of the day. Its assignment was to review the development of public education in the state from kindergarten through professional training and report to the Legislature as to the need for

additional schools and colleges. In 1919, a Joint Legislative Committee examined the evolving public colleges and university campuses and called for a broadening of the role of the normal schools and an effort to secure greater coordination among the public institutions of higher education -- the latter a call that has been repeated frequently in recent years.

Twenty-two years later, in 1931, the Legislature approved the appointment of a second commission to study all aspects of education in California. The commission's report, which became known as the "Suzzalo Report" after the commission's chair, Henry Suzzalo of the Carnegie Foundation, recommended that, among other things, the State Board of Education take a larger role in supervising the Junior Colleges, the Regents assume jurisdiction over the State Colleges, and a State Council for Educational Planning and Coordination be established. Such a council was established and charged with studying "problems affecting the relationship between the ... public school system" -- which included the Junior Colleges and State Colleges -- "and the University of California," but it was active only until 1941.

In 1945, as it became evident that the demand for higher education was likely to expand rapidly with the end of World War II, the State Board of Education and the Regents agreed to establish a Liaison Committee that would provide a means for better coordinating the growth of the Junior Colleges, State Colleges, and the University of California. The committee was to serve as a forum for the discussion of any proposal before one of the boards that might affect the other before such a proposal might be submitted to the Legislature. It was also expected to satisfy growing interest among legislators in the establishment of an agency specifically charged with providing better coordination between the two boards (Challenge, p.3).

Strayer Report

Perhaps the most important accomplishment of the Liaison Committee was to initiate what was to be the first of a series of major studies of post-secondary education in California. This study, which was authorized by the Legislature and conducted under the supervision of the Liaison Committee, had as its objectives an analysis of the needs of the state for various types of higher education, consideration of proposed changes in the organization of public higher education, and an evaluation of current financial support for the institutions. The final report of the study was issued in 1948 and titled A Report of a Survey of the Needs of California in Higher Education, but was better known as the "Strayer Report", after its principal author, George D. Strayer. The report supported development of the tripartite system of public higher education that had evolved during the first half of the century but also emphasized the need for functional differentiation. The Junior Colleges were not to offer courses beyond the fourteenth year or attempt to become four-year colleges. The State Colleges were asked to terminate their two-year curricula, with certain exceptions, and offer vocational education (in addition to the liberal arts) "beyond the technical level of the junior colleges and below the professional schools of the University" (Survey, p.31), raise their admission standards, and grant

master's degrees. The University of California was asked to continue to "select its students from the standpoint of their special ability to pursue effectively the programs that the University offers" (Survey, p.38), continue to expand its professional curricula and research activities and further reduce its lower division programs.

The Strayer Report also supported the development of additional Junior Colleges in several areas; new State Colleges in Sacramento, Los Angeles, and Orange counties; and expansion of existing State College and University of California campuses to accommodate rising enrollments. In addition, it recommended the establishment of state "subsistence" scholarships and fellowships for undergraduate and graduate students.

The Restudy

Only five years later, the Legislature asked for another study of higher education, The Restudy of the Needs of California in Higher Education, commonly referred to as the "Restudy" although it was in fact more comprehensive than the 1948 study. When completed in 1955, the Restudy, which was again directed by the Liaison Committee but with substantial staff assistance from the segments, presented some 140 recommendations regarding the need for new campuses, the functions and programs of each segment, their management and governance, intersegmental coordination, and plant capacity standards and building needs.

Among the more important recommendations were that the role of the Junior Colleges in providing lower division academic and vocational instruction should continue to grow while lower division enrollment at the State Colleges and University of California should be reduced in relation to their upper division and graduate enrollment. In other ways, also, the Restudy reaffirmed the "principal of differentiation of functions" for the public segments that was proposed in the Strayer Report. It was again recommended that the State Colleges be authorized to offer master's degrees but that the University of California retain exclusive authority to award doctoral degrees. The University was urged to further tighten its admission requirements for first-time freshmen and transfer students, and the Junior Colleges were urged to establish minimum retention standards and establish more selective policies for admission to their transfer curricula.

The Restudy also proposed that a statewide governing board and administrative office be established for the State Colleges with adequate staff for centralized planning and administration of the colleges. And it recommended creation of a Bureau of Junior Colleges in the State Department of Education "to supply the leadership so necessary to the development of the junior college programs and the coordination of their activities" (Restudy, p.306). In addition, the Restudy restated the need for a state scholarship program and had much to say about campus space utilization standards, capital outlay funding, and the need for student housing on campus.

The Need for Additional Centers

In 1957, the Liaison Committee published a third report, this one dealing with criteria for determining the need for additional Junior Colleges, State Colleges, and University of California campuses and advancing a priority listing of proposed new campuses in accordance with these criteria. Titled The Need for Additional Centers for Public Higher Education in California, the report urged a further expansion of Junior College facilities and a state contribution to Junior College construction costs. It also suggested ten geographical areas in which the establishment of new State Colleges should be considered, as well as two areas in which new campuses of the University of California would be needed if the existing campuses were not to be greatly expanded. Three new State Colleges (Hayward, Fullerton, and Sonoma) and two new University of California campuses (Santa Cruz and Irvine) were subsequently developed in accordance with these recommendations.*

The 1960 Master Plan for Higher Education

Despite the efforts of the Regents and the State Board of Education to deal with an accelerating competition for students and programs among the public segments within the liaison committee, that competition had by 1959 developed into what University President Clark Kerr termed "real anarchy" (Coons, p.32). Rapidly increasing enrollments, dissatisfaction with the development of the Junior Colleges, a clamor for new campuses in many areas of the state, the "increasingly obvious inability of the State Board of Education to manage the State Colleges" (Challenge, p.3), and the inadequacy of the Liaison Committee as a coordinating mechanism were all contributing to a deepening concern among legislators for the orderly development of higher education. The growing possibility of legislative intervention led Kerr and Roy Simpson, then Superintendent of Public Instruction, to ask the Legislature on behalf of the Liaison Committee for one more chance for the higher education community to attempt to deal with its problems internally. The Legislature acceded and in 1959 directed the Liaison Committee to "prepare a master plan for the development, expansion, and integration of the facilities, curriculum, and standards of higher education, in the junior colleges, state colleges, the University of California and other institutions of higher education of the state, to meet the needs of the state during the next ten years and thereafter..." (Master Plan, p.v).

The Master Plan Survey Team that was appointed by the Liaison Committee to carry out the study was made up of two representatives each from the Junior Colleges, the State Colleges, the University of California, and the independent colleges and universities under the chairmanship of Dr. Arthur Coons, president of Occidental College. It was assisted by a number of technical and advisory committees made up of segmental staff and other interested state agency personnel.

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*A fourth State College was developed in Turlock, based upon other considerations.

It was agreed that the Survey Team would present only recommendations about which there were no dissenting views among its members, and it was clear from the outset that the study was unlikely to stray far from the path established in the preceeding Liaison Committee studies. Thus, the Survey Team's report, which was to be the blueprint for the development of post-secondary education in California for the next quarter-century, largely reaffirmed recommendations of the Strayer Report and the Restudy and endor sed much of what had evolved up to that time. It recommended once more that the State Colleges be taken out from under the State Board of Education and be given their own governing board, efforts be made to develop Junior Colleges in areas not yet adequately served, and that differentiation of function continue to be a guiding principal for the tripartite public system. It called once more for an increase in state support for the Junior Colleges and some state contribution to Junior College capital outlay costs. It reaffirmed the "tuition-free" policy of the University and State Colleges but stated that they should charge students for certain operating costs and that all auxilliary services should be self-supporting. The report also made very explicit recommendations regarding eligibility for the State Colleges (the top one-third of California high school graduates) and for the University of California (the top one-eighth), that were in line with the eligibility pools established by the two segments.*

The Survey Team departed most significantly from earlier proposals in recommending that lower division enrollment in both four-year segments be reduced from approximately 51 percent to 40 percent of total enrollment by 1975 and that 50,000 lower division students be diverted to the Junior Colleges by that time. It also recommended that the Legislature establish a Coordinating Council for Higher Education to advise the segments, the Legislature, and the Governor on the planning and coordination of higher education. The Survey Team recommended, however, that the new agency retain the representative structure of the Liaison Committee, arguing that only segmental representatives could be expected to be well informed on the issues that would come before the council and act decisively on problems as they arose (Master Plan, pp.38-39).

The Survey Team also recommended expansion of the State Scholarship Program that had been established in 1955 and was becoming an important source of support for the independent institutions and a counterbalance to the state's "tuition-free" policy for California residents attending the public institutions. It further recommended a number of measures intended to increase the supply of faculty, including student financial aid, expanded graduate programs, a greater emphasis on teaching in University doctoral training, and higher faculty salaries.

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*At the time, the State Colleges considered their eligibility pool to be upper 45 percent of high school graduates but were actually drawing most of their students from the upper 30 percent. Similarly, the University of California considered its eligibility pool to be the upper one-sixth of high school graduates, but was drawing most of its students from the upper one-eighth (Coons, p.151). Thus the changes in their eligibility pools, plus a requirement the "limited" students meet regular admissions requirements, was expected to divert only 10,000 students to the community colleges by 1975 (Master Plan, p.59).

The Survey Team's recommendation that the State College board, the Coordinating Council, and a statement of the functions of each segment be placed in the State constitution was rejected, but, with minor modifications, most of the recommendations that required legislative action were enacted in the Donahoe Act of 1960. Thus in statute and in administrative action the 1960 Master Plan became the guiding document for the growth of both public and private higher education in California for the second half of this century, and it did so in large part by obtaining agreement among the principal participants to abide by the policies that had evolved up to that time.*

Joint Committee Study: 1967-69

As the first decade under the Master Plan approached its end, the Legislature determined that it was time to reexamine the state's system of higher education in light of the evolution of student needs and interests and the state's experience with the Master Plan during that period. A Joint Legislative Committee on Higher Education chaired by Assembly Speaker Jesse Unruh was appointed and directed to "ascertain, study and analyze all the facts relating to the development of higher education under the Master Plan" and examine the future needs of the state for higher education (Challenge, p.iii).

The two-year study that followed produced a staff report titled The Challenge of Achievement in which it was stated that the objectives of the study had been to find ways to make higher education "much more accessible to ethnic minorities," radically reshape the stucture of public higher education "to make coordinated planning and development a reality," and see that resources be allocated "not according to tradition, but where they will be most effective in the instruction of students, the advancement of research, and the promotion of service to the communities" of the state (Challenge, p.4).

The report presented a battery of recommendations dealing with equality of opportunity for low-income students, reorganization of the governance structure of the public institutions, student attrition, public support for private colleges and universities, state budgeting procedures, and the development of an "urban focus" in response to some of the outstanding social issues of that day. Several of the report's recommendations regarding counseling, financial aid, and other assistance for minority and other low-income students were eventually adopted. However, its recommendations regarding the restructuring of the public segments on a regional and statewide basis that would have cut across segmental lines attracted little backing, and the same was true of its proposal for increased support for private institutions. Whatever the merits of those proposals, public and legislative attention was focused by then upon the recurring rash of campus disturbances rather than upon issues of governance, financing, or student access.

*One important change that was not in the Master Plan was the removal of the Junior Colleges from the jurisdiction of the State Board of Education in 1972 and their renaming as Community Colleges governed, at the state level, by their own Board of Governors.

Select Committee on the Master Plan

In 1971, the Coordinating Council for Higher Education appointed a Select Committee to undertake "a review of the nature and application of the 1960 Master Plan and of the conditions forecast for the 1970's in order to advise the Coordinating Council whether the current Master Plan should be maintained intact, revised, or replaced" (Select Committee, p.v). Relying principally upon studies conducted by the Council, the Select Committee recommended making few changes in higher education as it had evolved under the Master Plan, but it did recommend that the Legislature expand representation on the Council itself and give it a greater role in statewide planning for higher education.

Joint Committee Study: 1972-73

Even before its work was completed, however, the Select Committee was overshadowed by a recreated Joint Committee on Higher Education that was activated in March 1971. The committee, chaired by Assemblyman John Vasconcellos, undertook over the next two years an unprecedented series of conferences, symposia, public hearings, and surveys. The Committee ultimately produced a report that advanced 49 recommendations regarding the objectives of postsecondary education in California, its structure and governance, its coordination and planning, access for and retention of students, the role of the independent institutions, and the financing of the public institutions.

Many of the committee's recommendations reaffirmed those of the 1960 Master Plan, but several departed from that document in important ways. Among the recommendations that attracted the greatest attention were those that called for creation of a special committee to nominate appointees to the governing boards of the public segments; the addition of faculty and student representatives as nonvoting members of the governing boards; abolition of the Coordinating Council for Higher Education and its replacement with a stronger Postsecondary Education Commission having a majority of members representing the public and greatly increased responsibilities for advising the Governor and the Legislature as to the governance, operation, and financing of postsecondary education; authorization for the University of California and the California State University to employ "nontraditional" criteria in determining the eligibility of one-eighth of their lower division students; the creation of regional councils to promote interinstitutional cooperation and comprehensive regional planning; and the establishment of a fourth public segment to develop new programs not being provided by the three existing segments.

Although no such "fourth segment" was created, several of the committee's recommendations were adopted. Perhaps the most important of these was the replacement of the generally ineffectual Coordinating Council with the much stronger Postsecondary Education Commission. The new agency consisted of 12 public members and 11 institutional representatives until 1979, when its total membership was reduced to 15, including 9 public members and 6 institutional representatives.

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BACKGROUND PAPER NO. 2:

THE DEMAND FOR POSTSECONDARY EDUCATION IN CALIFORNIA TO THE YEAR 2000: THE GROWTH AND CHANGING COMPOSITION OF CALIFORNIA'S POPULATION, 1960-1985 AND 1985-2000; REGIONAL DIFFERENCES IN PROJECTED GROWTH, ETHNICITY, AND AGE DISTRIBUTION; ECONOMIC AND EMPLOYMENT TRENDS; POSTSECONDARY EDUCATION ENROLLMENT GROWTH 1960-1985; ENROLLMENT PROJECTIONS 1985-2000; IMPLICATIONS FOR PUBLIC POLICY.

Introduction

When the 1960 Master Plan for Higher Education was adopted, there were 15.2 million Californians. Twenty-five years later, in 1985, the figure had grown to 26 million. Although the growth rate is expected to be slower over the remainder of this century, population forecasters now estimate that by the year 2000 there will be 31.4 million Californians, or more than twice the 1960 number.

California has undergone many other changes since the Master Plan for Higher Education was drafted. Not only are there many more Californians, but the composition of the population has changed dramatically. Not surprisingly, these changes, and the evolution of the State's economy, have been reflected in changes in the enrollment statistics for public and private postsecondary education. In addition to the enormous growth in total enrollment and in the numbers of both public and private institutions, there have been increases in the proportion of women and part-time students, an increase in students who are past "college age," and an increase in the number of minority students.

Although the period of greatest growth is behind us, several of the most important changes in the demography of the State are likely to continue through the remainder of this century -- and continue to have a substantial impact upon the extent and character of the demand for postsecondary education in California.

The Growth and Changing Composition of California's Population: 1960-1985 and 1985-2000

During the first decade following the drafting of the 1960 Master Plan, the State's population continued the rapid increase that had begun following World War II. By 1970, the population had grown by nearly 5 million, or about 31 percent. It then began to grow more slowly but nevertheless increased by another 5 million and more by 1985. Annual growth rates, which had dropped below two percent in the mid-1960s, regained that level in the late 1970s and early 1980s.

Between 1970 and 1980, net immigration was the most important factor in the State's growth. According to Department of Finance estimates, during the late 1970s one-fourth of all documented immigrants to the United States and about one-third of all Southeast Asian refugees settled in California.

Documented immigration (77 percent foreign, 23 percent domestic) was estimated to be 46 percent Asian and other, 30 percent Hispanic, 18 percent white, and 6 percent Black. In addition, according to U.S. Census Bureau figures, approximately half of the two million undocumented immigrants counted in the 1980 Census were residing in California and most of them, an estimated 818,000, entered the State in the 1970s.

Immigration has had an important impact on the composition of the State's population as well. In 1960, 82.7 percent of the State's population was classified as white, 5.6 percent Black, 9.3 percent Hispanic, and 2.4 percent Asian and other. By 1980, as a consequence of immigration from Latin America and Asia, whites had dropped to 67 percent, while Blacks had risen to 7.8 percent, Hispanics had risen to 19 percent and Asian and others to 7 percent. During the last 15 years of this century, it is expected that the total population of the State, as noted earlier, will grow to 31.4 million (Finance, February 1986).* The change in the ethnic distribution is expected to continue with the result that by 2000, whites will be 54 percent, Blacks 8 percent, Asians and others 11.8 percent, and Hispanics 26.8 percent. Display 1 presents the change from 1980 to 2000 graphically.

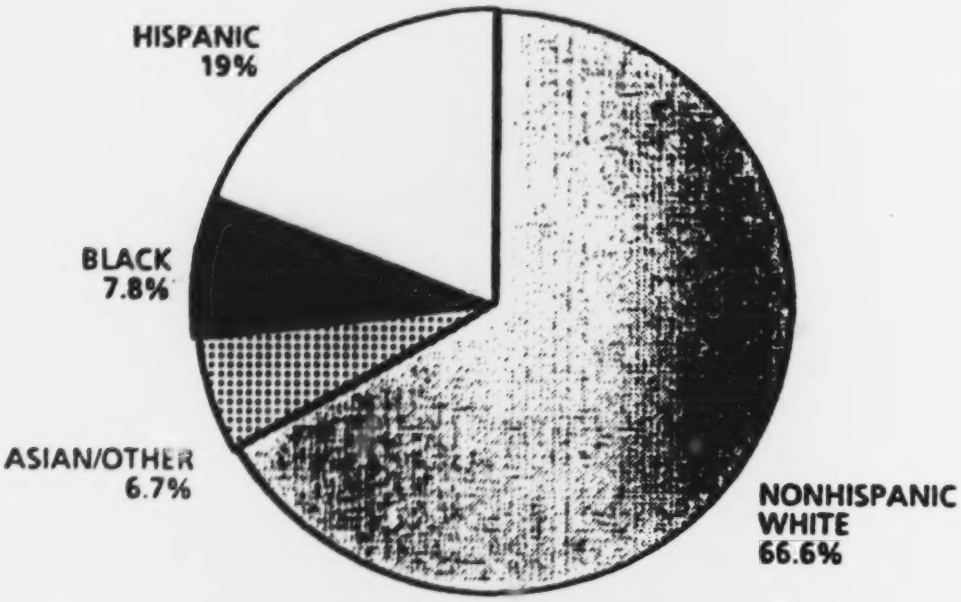
The continuing growth of the minority population in California is expected to be accompanied by a general aging of the population, despite the fact that the median ages for Hispanics, Blacks, and recent immigrants are below that for the rest of the population. Increasing life expectancy, the aging of the post-World War II "baby-boom" generation, and a continuation of the lower birth rates of the past two decades are expected to raise the median age from 30 to 36 years by the year 2000. As shown in Display 2, there is expected to be some increase in the number of Californians age 10-19 years, a drop in the number aged 20-34, a substantial increase in those aged 35-54, and some increase in those aged 60 and above.

Regional Differences in Projected Growth, Ethnicity, and Age Distribution

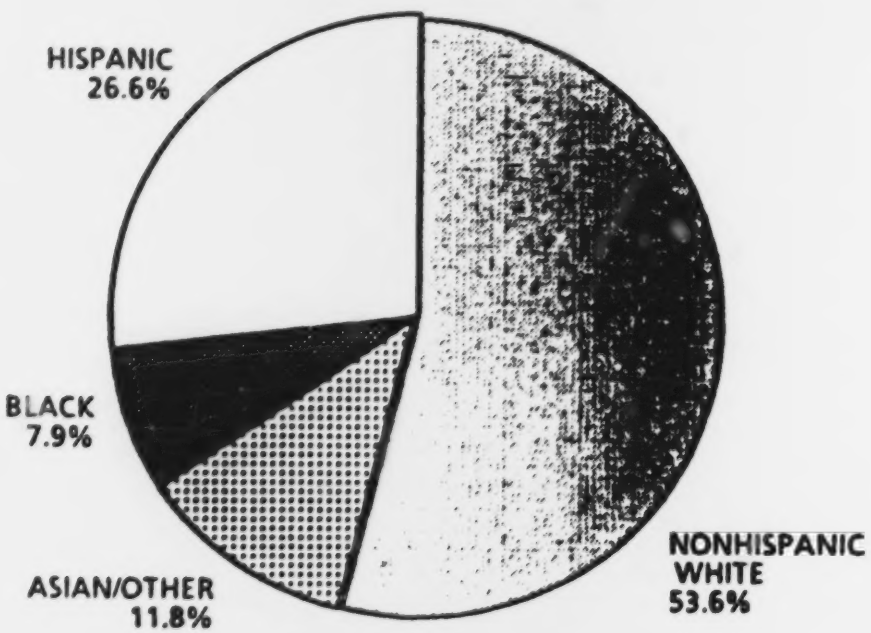
The State's population growth in the next 15 years will not, of course, be uniform throughout the State. Among the eight metropolitan regions of the State, the largest growth, both absolute and relative, will occur in the Riverside-San Bernardino region (Display 3). The projected growth for that region and for the Ventura-Santa Barbara region can be seen largely as spillover from the densely settled Los Angeles-Long Beach region. The population growth estimates for San Diego and Sacramento counties are also impressive, and that for the Fresno-Bakersfield region is also expected to experience an increase. While the Los Angeles-Long Beach area is expected to edge out New York as the nation's largest metropolitan statistical area by the year 2000, it, along with Orange County and the San Francisco Bay Area, is expected to experience growth rates below that of the State as a whole.

*This projection is based on the assumptions that "fertility and mortality differentials by race decline" and "the racial and ethnic distribution of migration approached the race/ethnic makeup of the world and the nation."

Display 1: Population by Race and Origin, 1980 and 2000

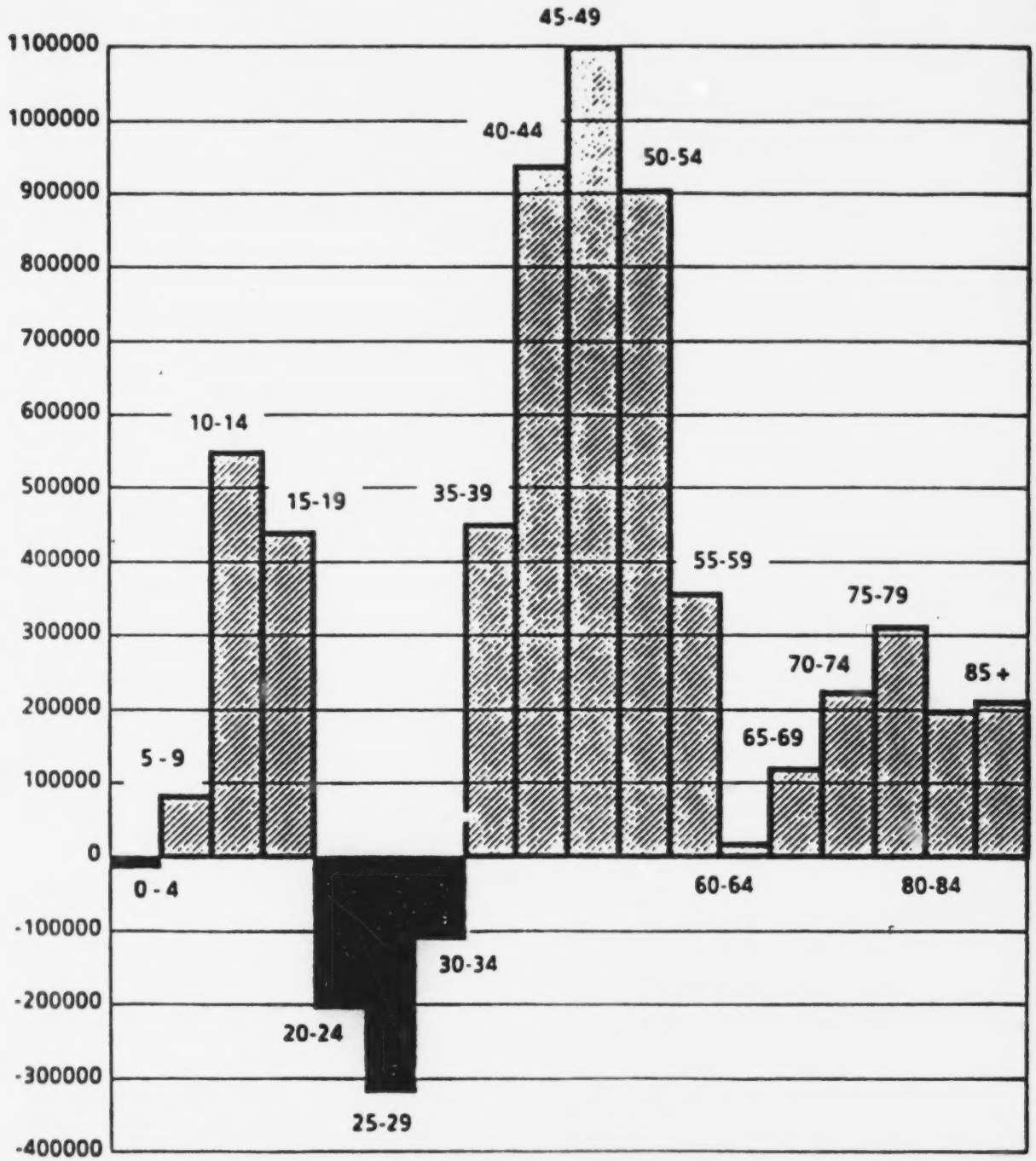


2000 CALIFORNIA POPULATION



Source: California Department of Finance

Display 2: Changes in the Age Distribution of California's Population, 1985 to 2000



Source: California State Department of Finance.

Important regional differences are also forecast with respect to the aging of the population. All six San Francisco Bay Area counties except Santa Clara will start with above average median ages, and all except Alameda will age faster than the State as a whole. The Sacramento and Ventura-Santa Barbara regions approximate the statewide average for median age and will continue to do so. The Fresno-Bakersfield region, which has a lower than average 1980 median age, is also expected to have a less than average rate of increase in median age. The Riverside-San Bernardino region had a 1980 median age close to the statewide average but, presumably because of immigration of younger persons, will have less of an increase in median age than will the State as a whole. In the Los Angeles-Long Beach region, too, the increase in median age over the next 15 years will be less than that for the State as a whole. The Orange and San Diego regions, on the other hand, begin with median ages close to the statewide average, but the increase in their median ages is expected to exceed the statewide average.

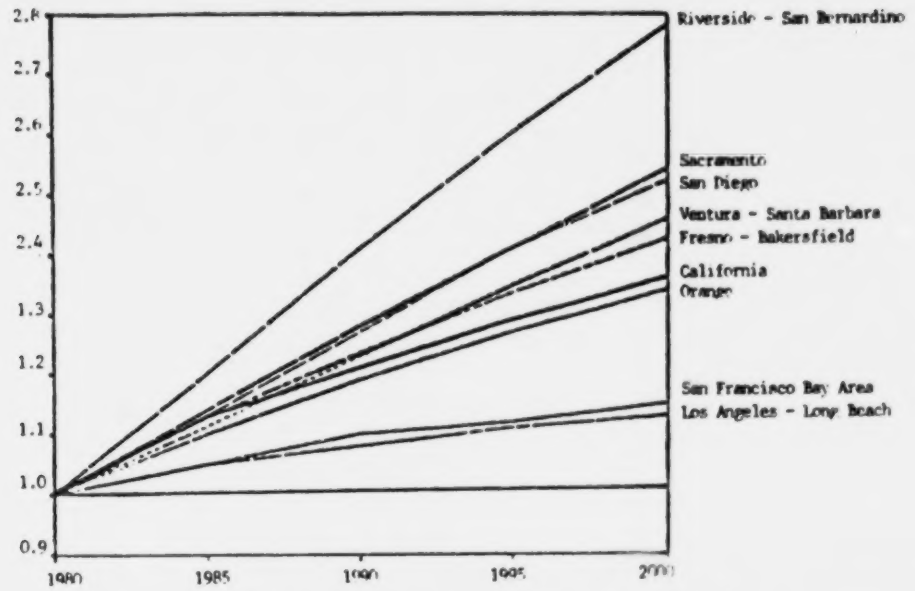
Except for the Riverside-San Bernardino region, all regions are expected to experience a drop in population aged 15-24, and that age group will not begin to climb again until near the end of the century when the "echo" of the earlier "baby boom" generation will be heard (Display 4). Not until the mid-1990s will the number of 15-24 year-olds in the Fresno-Bakersfield, San Diego, Ventura-Santa Barbara, and Sacramento regions begin to rise so that they join Riverside-San Bernardino in out performing the statewide average in the 15-24 year-old population. The three most populous regions, Los Angeles, Orange, and the San Francisco Bay Area, are expected to close the century with fewer persons in the 15-24 year-old age group than they had in 1980.

Economic and Employment Trends

California's economy is highly diversified and accounts for 10 percent of the nation's gross national product. In 1983, the State's 12 million workers produced goods and services worth $400 billion (Bouvier and Martin, 1985, p.24). However, the basic industries that propelled California into economic prominence after World War II are declining. Within the last decade, lumber mills, auto and tire factories, steel plants, canneries, railroad yards, ship yards, and other basic industries have closed. The new economic trend is toward the service industries, especially those involving information services. Between 1970 and 1983, the proportion of workers in manufacturing fell from 19.4 to 17.7 percent, and employment in services rose from 15.8 to 21.8 percent (Bouvier and Martin, 1985, p.26).

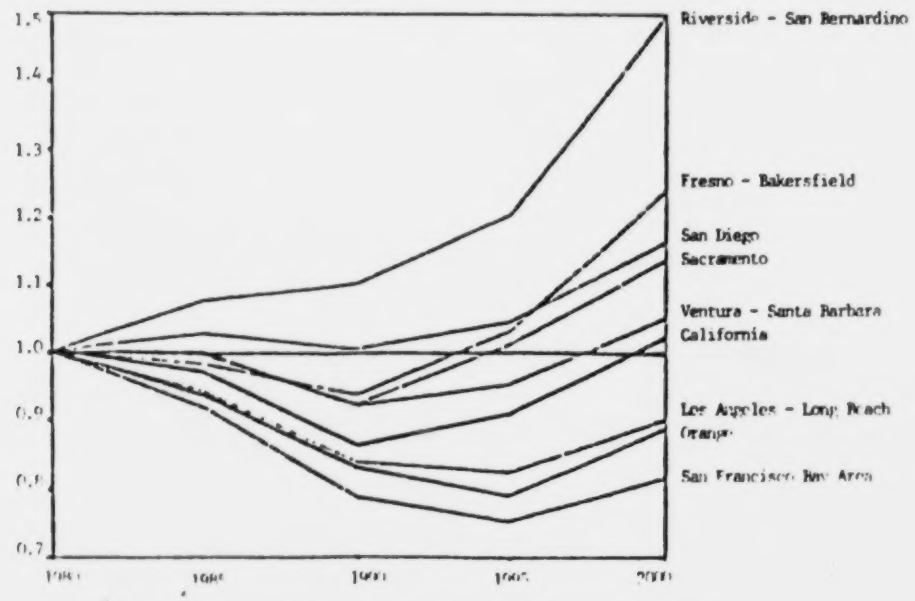
Job openings and employment projections through 1995 developed by the U.S. Bureau of Labor Statistics illustrate this trend toward service-related employment. Wholesale and retail trade; finance, insurance, and real estate; and the services are expected to provide most of the new jobs through 2000. By early in the next century, one in four Californians will have a job in the services sector, according to these projections.

Display 3: Total Population of Eight California Metropolitan Regions, Indexed to 1980



Source: California Department of Finance, 1983;
U.S. Department of Commerce, Bureau of the Census, 1982

Display 4: Population of 15-24- Year Olds in Eight California Metropolitan Regions, Indexed to 1980



Source: California Department of Finance, 1983;
U.S. Department of Commerce, Bureau of the Census, 1982.

The trend toward a "post-industrial" society, however, is not without negative consequences. The shift from a mass production economy to an information/service economy has produced relatively few new jobs requiring high skills. High-wage manufacturing jobs have been lost while lower-wage trade and service jobs have increased, and the latter are more likely to involve unskilled workers, both native Californians and immigrants.

As a consequence of these changes in the economy, some analysts predict a growing split in the workforce between those who are highly educated and highly paid professionals and those who are semi-skilled and employed at the technician level in the service sector. The development of this two-tiered society may force young adults either to compete for the technical and professional jobs or to accept relatively low-paying, often dead end, service industry jobs. Moreover, the large influx of immigrants and refugees seems to be reinforcing this two-tiered occupational structure. Many of these newcomers are willing to accept low-paying jobs in expanding service fields, and they now account for half of the annual increase in employment in California.

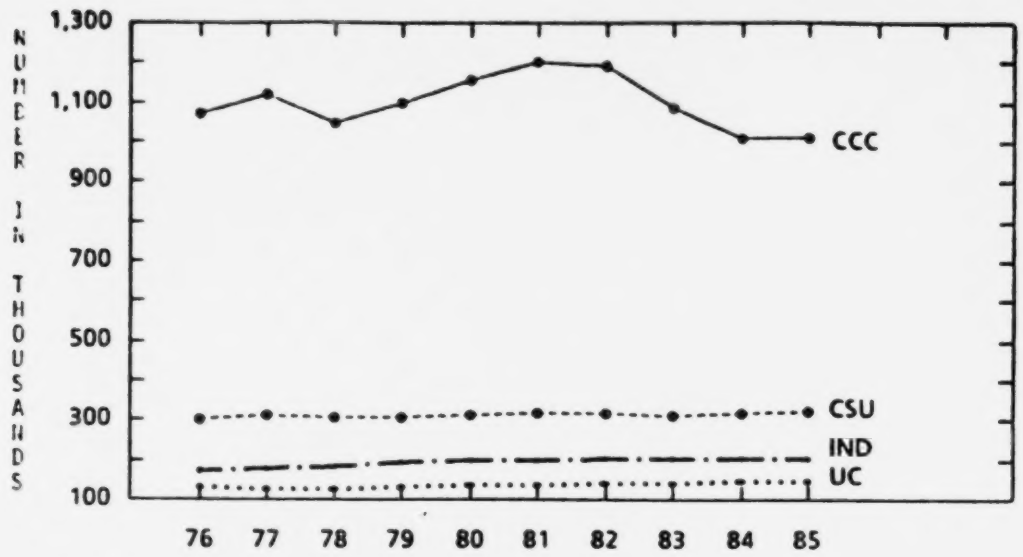
Postsecondary Education Enrollment Growth: 1960-1985

As noted earlier, all of these changes have had and will continue to have important implications for the demand for postsecondary education in California. In 1960, when the Master Plan Study was completed, there were 84 public colleges and universities enrolling a total of 391,470 students and 69 accredited private "independent" institutions with nearly 76,000 students. Within ten years, enrollment had nearly doubled, and by 1985 it had reached nearly 1.7 million, or more than four times the 1960 figure. In addition, an estimated one-half million Californians were enrolled in non-credit courses, workshops, extensions, and community service offerings of the colleges and universities, and another half million were enrolled in postsecondary proprietary schools. (Some of these students were enrolled concurrently in more than one type of institution.)

When the public and independent segments are examined separately, however, the enrollment trends look very different, as shown in Display 5. The Community Colleges, for example, posted a 5.9 percent decrease during the past ten years. This decrease, however, does not reflect the true Community College enrollment picture. In reality, Community College enrollment has fluctuated markedly over the past decade. After a drop in 1978 following passage of Proposition 13, it increased in Fall 1981 to an all time high of over 1.2 million, which was an 11.9 percent increase over the 1976 base year, and since then it has been declining once more.

In contrast, California State University enrollment increased by 20,963 (6.9 percent) over the past decade. Although CSU experienced marginal decreases in 1978 and again in 1982 and 1983, its total headcount enrollment has increased to a record high of 324,687 students in Fall 1985. Similarly, the University of California in 1985 registered its highest number of students, 147,957, after a 15 percent increase over the preceding ten years. However, the University's enrollment pattern has differed from those of the other two public segments in that its only enrollment decline occurred in 1977. Following that year, the University experienced consistent growth through 1985.

Display 5: Opening Fall Enrollments in California's Segments of Higher Education, 1976 - 1985



Source: California Postsecondary Education Commission

Table 1: Opening Fall Enrollments in California's Segments of Higher Education, 1976-85 (in thousands)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
California Community Colleges	1,073.1	1,120.5	1,047.2	1,100.2	1,152.7	1,201.0	1,190.5	1,086.4	1,009.0	1,010.0*
California State University	303.7	312.4	306.2	306.8	313.8	319.6	315.8	313.9	316.0	324.7
University of California	128.6	126.5	127.9	131.9	135.8	138.7	139.1	141.3	144.6	148.0
Independent Institutions	171.5	177.4	180.9	192.2	195.8	197.8	202.1	204.4	202.4	201.2*

Source: California Postsecondary Education Commission
* Estimates

California's independent degree-granting institutions, approximately 350 in number, enrolled in excess of 201,000 students in 1985, reflecting a 17.3 percent increase over the 171,500 enrolled in 1976. Because of the varying number and types of independent institutions reporting their enrollments from year to year, enrollment information for the institutions lacks the depth and scope of that reported by the public segments. However, historical trend data for this segment are included in the Appendix as Displays 4, 8, and 12.

Approximately one-quarter of the growth in enrollment for all four segments can be attributed to the State's overall population growth, which means that three-quarters must be attributed to changes in the age distribution of the population and to very substantial increases in participation rates for adults of all ages. Undoubtedly, increases in the number of high school graduates; increases in the enrollment rate for women, and particularly women past the traditional college age; increases in enrollment of older persons of both sexes; and increases in part-time enrollment were among the principal factors behind this phenomenal growth.

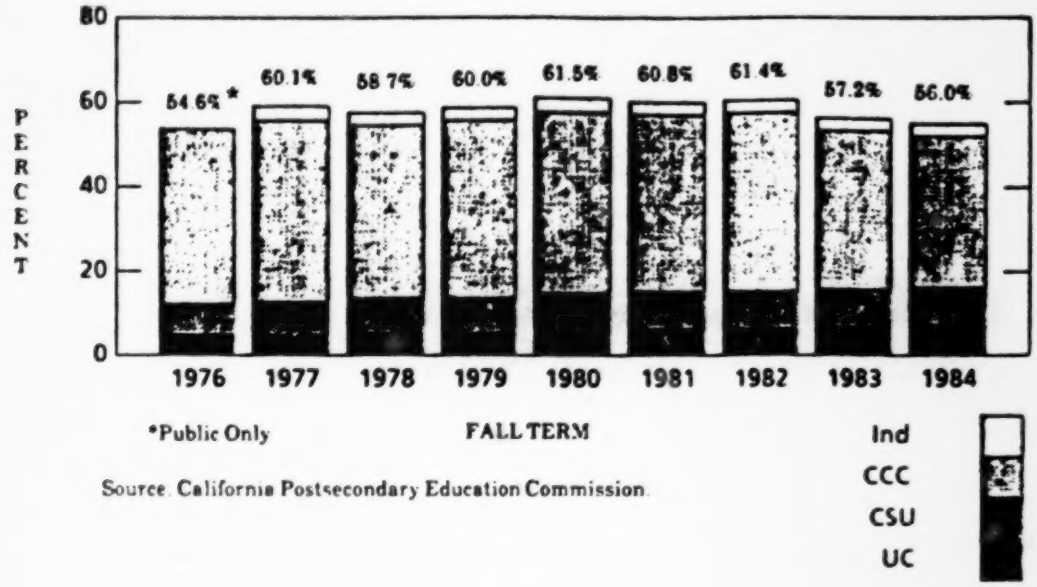
Between 1960 and 1985, the number of high school graduates increased from 160,000 to 240,000, or 50 percent, although in the past decade the size of California's high school graduating class has declined by about 11.0 percent. Currently, about 56 percent of California's high school graduates enroll in California's colleges and universities in the fall term immediately following graduation. As expected, and as shown in Display 6, the large majority of these new first-time freshmen enroll in Community Colleges. Of every 100 freshmen enrolling in 1984, 65 enrolled in the Community Colleges, 16 attended the State University, 13 enrolled in the University, and 6 chose independent institutions.

Display 7 shows that in recent years the number and proportion of women enrolling in the State's degree-granting institutions has increased steadily. Ten years ago, approximately 47.9 percent of the State's higher education enrollment was female; in 1985 the proportion of women enrolling is estimated to have increased to 53 percent. 1977 was the watershed year when the percentage of women surpassed that of men statewide. More recently, it appears that the male-female mix has achieved relative consistency and that in the absence of some profound change in policy, such as restoration of the military draft, it is unlikely that any significant proportional changes will take place in the future.

The male-female ratios for the individual segments, however, differ markedly from that for all segments combined. In recent years, both the Community Colleges and the California State University (See Appendix, Displays 1 and 2) have increased beyond parity both the number and proportion of women enrolled. In contrast, at both the University of California and in independent institutions, men continue to outnumber their female counterparts. (See Appendix, Displays 3 and 4.)

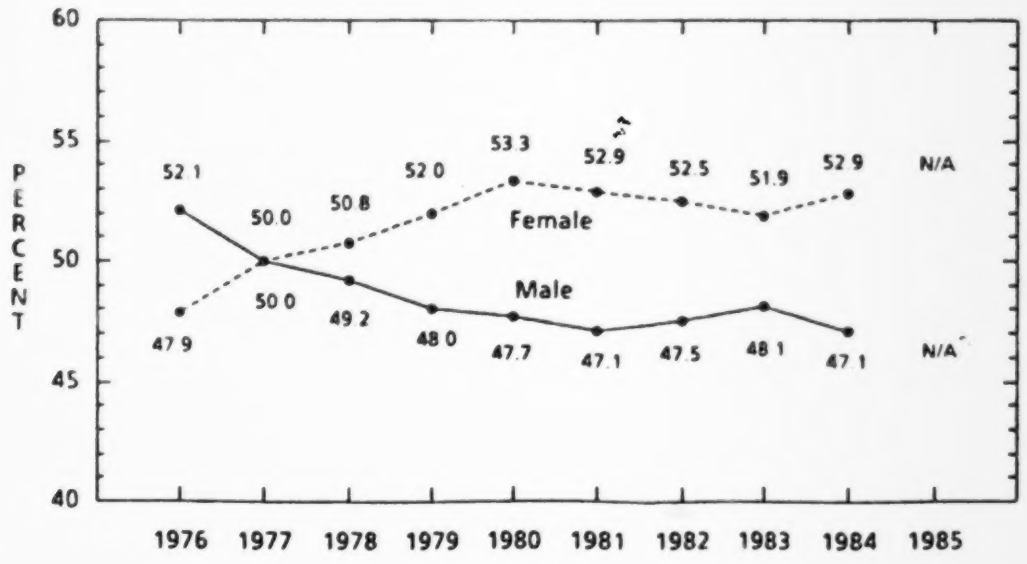
A large part of this increase in female enrollment in the Community Colleges and CSU is directly attributable to the number of women who entered or returned to college on a part-time basis in order to either develop or

Display 6: Statewide College-Going Rates for Recent High School Graduates, 1976-1984



Source: California Postsecondary Education Commission

Display 7: Percent of Men and Women Enrolled in California's Degree-Granting Institutions, Fall 1976 - Fall 1985



Source: California Postsecondary Education Commission

enhance skills necessary for entering the job market. As shown in Display 8, statewide enrollment data show that the percentage of part-time students -- those taking less than three-fourths of the normal load -- increased from 55.3 percent in 1976 to which of 60 percent in 1981, then dropped to 52.4 percent in 1984. Although these shifts are primarily attributable to substantial increases and decreases of the number of part-timers enrolling in Community Colleges, where about three out of four students attend part-time (See Appendix, Display 5), marginal increases in part-time enrollments were also evident at UC and, to a lesser extent, CSU (Appendix, Displays 7 and 8).

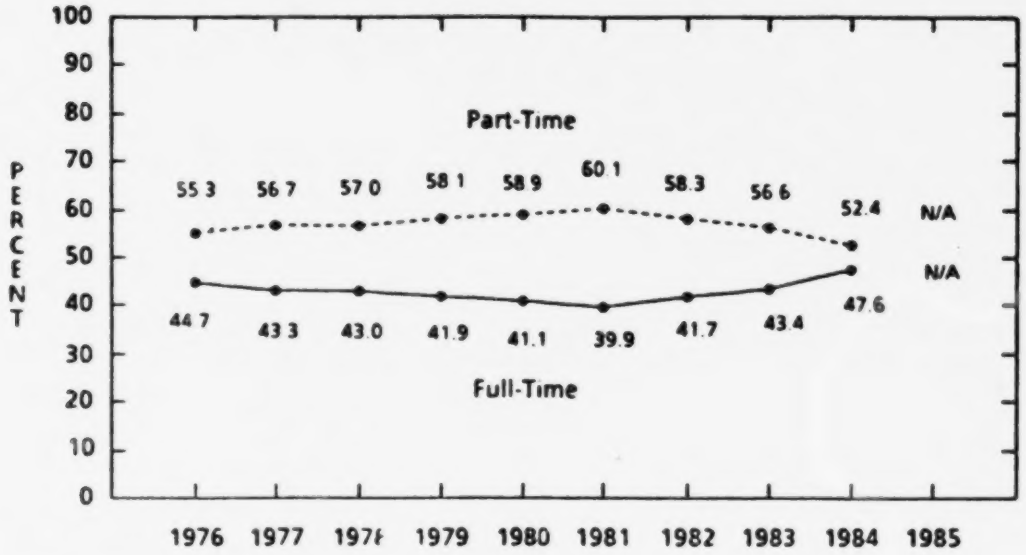
Ethnic minority students have also enrolled in increasing numbers and proportions over the past decade, but some ethnic groups continue to be underrepresented in comparison to their percentage of recent high school graduates. For example, and as shown in Display 9, the proportion of white college students declined between 1976 and 1984 from 76.5 percent to 70.1 percent, but in 1983-84 they constituted only 63.5 percent of California's high school graduates. The percentage of Asian college students increased from 5.1 to 10.6 percent while making up 7.2 percent of the high school graduates. Hispanic college students also increased their proportion from 8.9 percent to 10.7 percent; however, they constituted 18.1 percent of the high school graduates. And although Black college students constituted only 7.2 percent of statewide college enrollment, they were 8.7 percent of the high school graduates. Black and Hispanic students are underrepresented in the total headcount of postsecondary education, and they are particularly underrepresented in institutions with selective admission requirements and eligibility criteria: the University of California, some independent institutions, and to a lesser extent, the California State University. (A display of segmental shifts in ethnic participation appears in the Appendix as Displays 9, 10, 11, and 12.)

Statewide Enrollment Projections to the Year 2000

The Department of Finance has projected enrollments for the three public segments of postsecondary education to the year 2000 based upon current high school graduation rates, current college participation rates, current age cohort participation, and current gender distribution. Display 10 shows these projections indexed to 1976. (Detailed segmental data appear as Tables 1, 2, and 3 in the Appendix.)

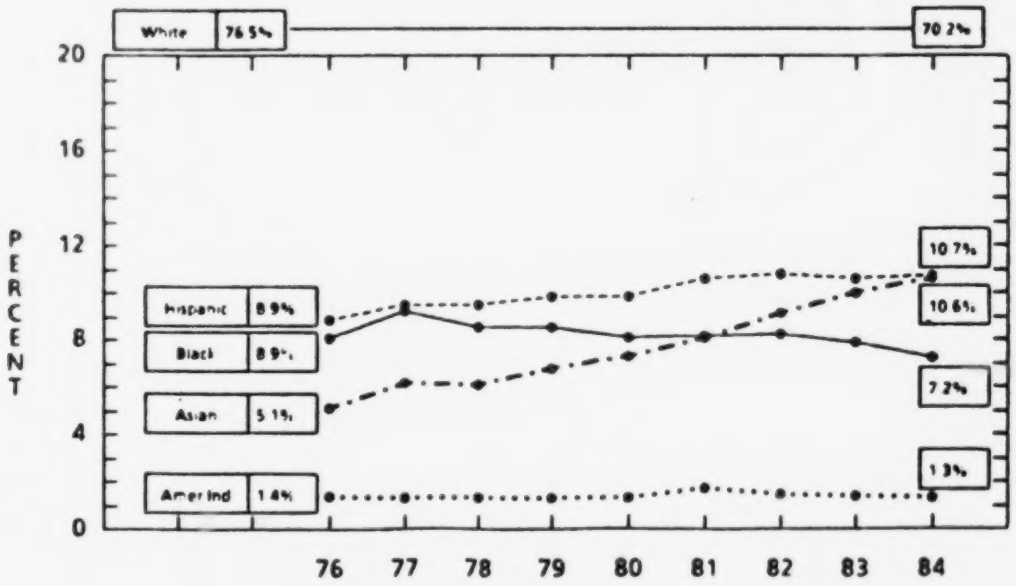
The Department of Finance has also projected enrollment at the undergraduate and the graduate levels for the California State University and the University of California. These projections show CSU undergraduate enrollment declining through 1996 and then returning to its current level by the year 2000. UC undergraduate enrollment is projected to follow a similar pattern, but to eventually increase by 4 percent by the end of the century. At the graduate level, CSU enrollment is expected to rise to 62,500 by the year 2000, and UC enrollment is expected to grow to nearly 30,000 with all of the growth occurring in the last five years of this century.

Display 8: Percent of Full-Time and Part-Time Students Enrolled in California Degree-Granting Institutions, Fall 1976 - Fall 1985



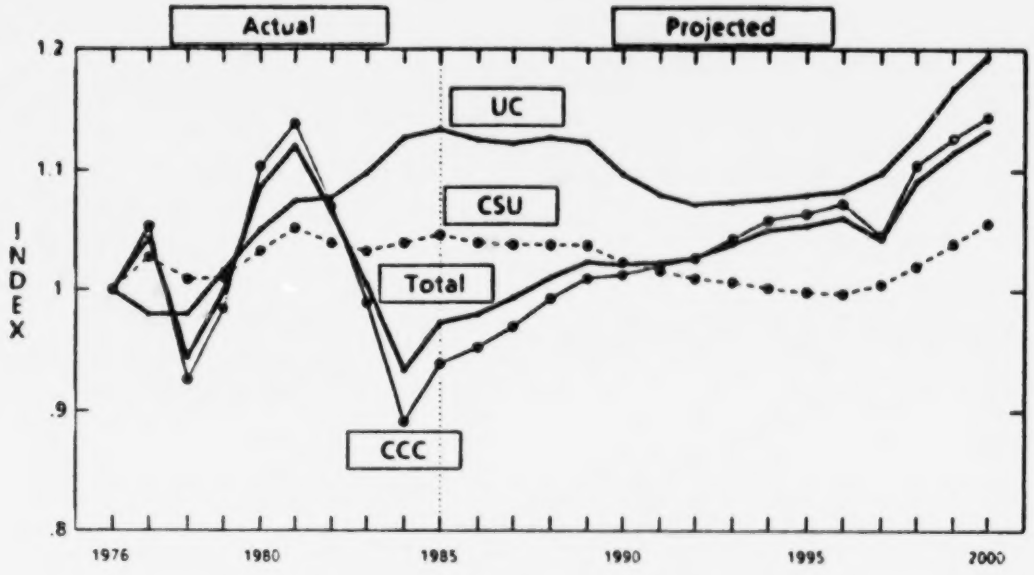
Source: California Postsecondary Education Commission

Display 9: Percent of Students Enrolled in Degree-Granting Institutions Statewide from Five Major Ethnic Backgrounds, 1976-1985



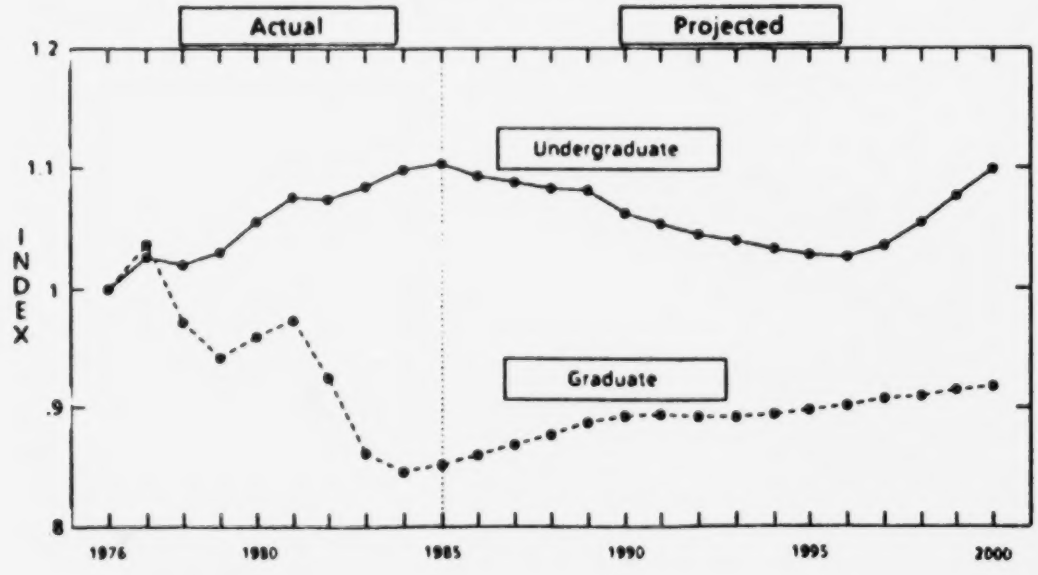
Source: California Postsecondary Education Commission

Display 10: Actual and Projected Fall-Term Headcount Enrollment in California's Three Segments of Public Postsecondary Education, Indexed to Fall 1976 to the Year 2000



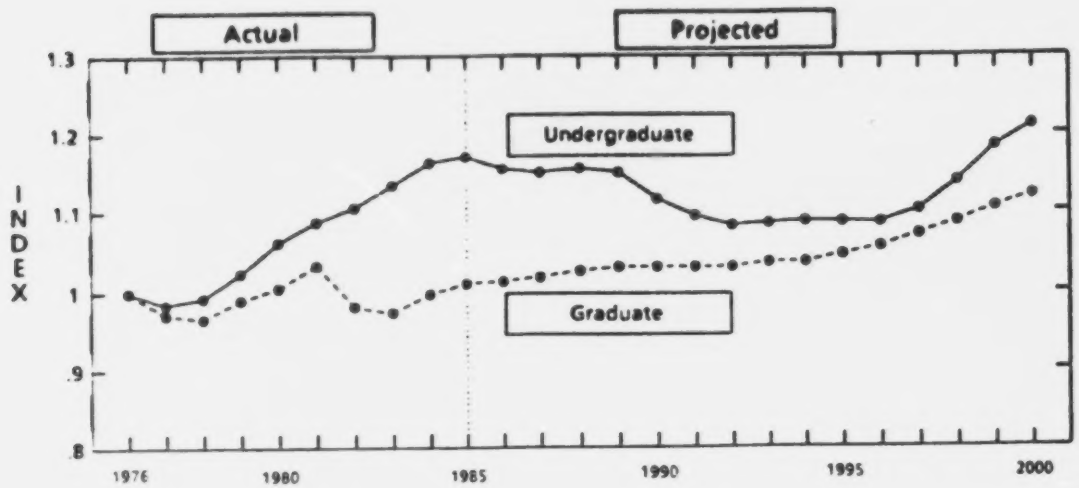
Source: California State Department of Finance

Display 11: Actual and Projected Fall-Term Headcount Undergraduate and Graduate Enrollments in the California State University, Indexed to Fall 1976 to the Year 2000



Source California State Department of Finance

Display 12: **Actual and Projected Fall-Term Headcount Undergraduate and Graduate Enrollments in the University of California, Indexed to Fall 1976 to the Year 2000**



Source California State Department of Finance

Implications for Public Policy

The projections for all segments of postsecondary education are heavily influenced by the aging of the population and declining percentage in the traditional 18-24 year-old "college age" group. Enrollment is also affected by changes in high school graduation rates, changes in participation rates for men and women, changes in participation rates among racial and ethnic minorities, changes in admission and retention policies and in student costs, and changes in the economic and employment environment of the State.

If current trends persist, enrollment in the State's public and private degree-granting institutions, as shown above, is likely to decline through the next decade and then return to its current level by the year 2000. There are, however, many factors that could alter this projection. Thus, in developing a new Master Plan for postsecondary education, the Commission must consider a number of "what effect" questions such as the following:

- What effect will improvements in K-12 education have on postsecondary participation?
- What effect will changes in high school graduation requirements have on postsecondary enrollments?
- What effect would an increase in high school graduation rates for minority students have on postsecondary participation?
- What effect would changes in postsecondary admission policies have on postsecondary participation?
- What effect would changes in retention and transfer policies have on participation rates?
- What effect would a shift of State policy favoring more part-time undergraduate education have on postsecondary enrollments?
- What effect would changes in student costs and student financial aid have on enrollment?

At present, the attrition rate among high school students in California is higher than the national average and appears to be worsening. Recent reforms in the public schools have been directed at increasing both student retention and academic preparation, but the challenge is not one for the public schools only. If an increase in high school graduation rates is to occur, both the public schools and the colleges and universities must motivate high school students to stay in school and ensure that those who graduate are academically prepared. Collaborative efforts between the public schools and postsecondary education institutions will thus be crucial to ensure that high school students not only graduate from high school but receive the preparation necessary for postsecondary participation.

Blacks, Hispanics, and American Indians remain underrepresented in California's postsecondary institutions. Enrollment for Blacks and American Indians has actually decreased in the last few years. There is, however, a

great potential for postsecondary enrollment in this population, as minorities will account for the greater part of the State's population growth in the next twenty years. Enrollment of minorities will depend a great deal on either increasing the pool of eligible minority students or increased efforts to enroll ineligible students as exceptions to regular admission policies. For the long term, however, if the enrollment of minority students is to increase, the numbers who are fully prepared to succeed must be increased. In addition, since approximately 80 percent of the Hispanics and Blacks who attend public postsecondary institutions enroll in Community Colleges, participation rates will be substantially increased only if transfer rates for these groups are increased.

The older adult population may also be an increasing clientele for postsecondary institutions. It is likely, however, that older students will make different demands on postsecondary education than do the traditional "college age" 18-24 year olds. The growth of the "older student" population -- those who are 25-40 and those who are in their 40's, 50's, 60's and older -- will have policy implications for increasing continuing education programs, retraining, and leisure-related general education. Other likely demands may be for more short-term courses on a part-time basis, in the evening and on weekends and in nontraditional, off-campus locations. Existing programs may have to be redefined and restructured in order to maximize institutional activities and facilities that can be used by these students.

Other factors related to the demographic consideration discussed previously will affect postsecondary enrollment patterns in the future. Among these are trends in federal and State student aid; the rate of increase in fees and other costs; conditions of the economy locally, statewide, and nationally; employment prospects for new graduates and the relative attractiveness of alternatives to college such as military service or the labor market.

In summary, the continuing growth in California's population and the important changes in its composition that are expected to continue through the balance of this century are likely to have very important implications for the evolving demend for postsecondary education in this State. The strong relative growth of the minority populations, the aging of the population generally, and significant regional differences in both factors -- changes that can be forecast with considerable confidence but which are well beyond the influence of this Commission -- together with changes that can be influenced by the Commission's recommendations, all must be considered as the Commission prepares to rewrite California's Master Plan for Postsecondary Education.

REFERENCES

Bouvier, Leon F. and Philip Martin. Population Change and California's Future. Population Reference Bureau, 1985.

California State Department of Finance. Projected Total Population for California by Race/Ethnicity, July 1, 1980 to July 1, 2020. Population Research Unit, February, 1986.

APPENDIX

APPENDIX

Display 1: Percent of Men and Women Enrolled in the California Community Colleges, Fall 1976 - Fall 1985

Display 2: Percent of Men and Women Enrolled in the California State University, Fall 1976 - Fall 1985

Display 3: Percent of Men and Women Enrolled in the University of California, Fall 1976 - Fall 1985

Display 4: Percent of Men and Women Enrolled in Independent Degree-Granting Institutions, Fall 1976 - Fall 1985

Display 5: Percent of Full-Time and Part-Time Students Enrolled in California Community Colleges, Fall 1976 - Fall 1985

Display 6: Percent of Full-Time and Part-Time Students Enrolled in the California State University, Fall 1976 - Fall 1985

Display 7: Percent of Full-Time and Part-Time Students Enrolled in the University of California, Fall 1976 - Fall 1985

Display 8: Percent of Full-Time and Part-Time Students Enrolled in Independent Degree-Granting Institutions, Fall 1976 - Fall 1985

Display 9: Percent of Students Enrolled in the California Community Colleges from Five Major Ethnic Backgrounds, 1976 - 1985

Display 10: Percent of Students Enrolled in the California State University from Five Major Ethnic Backgrounds, 1976 - 1985

Display 11: Percent of Students Enrolled in the University of California from Five Major Ethnic Backgrounds, 1976 - 1985

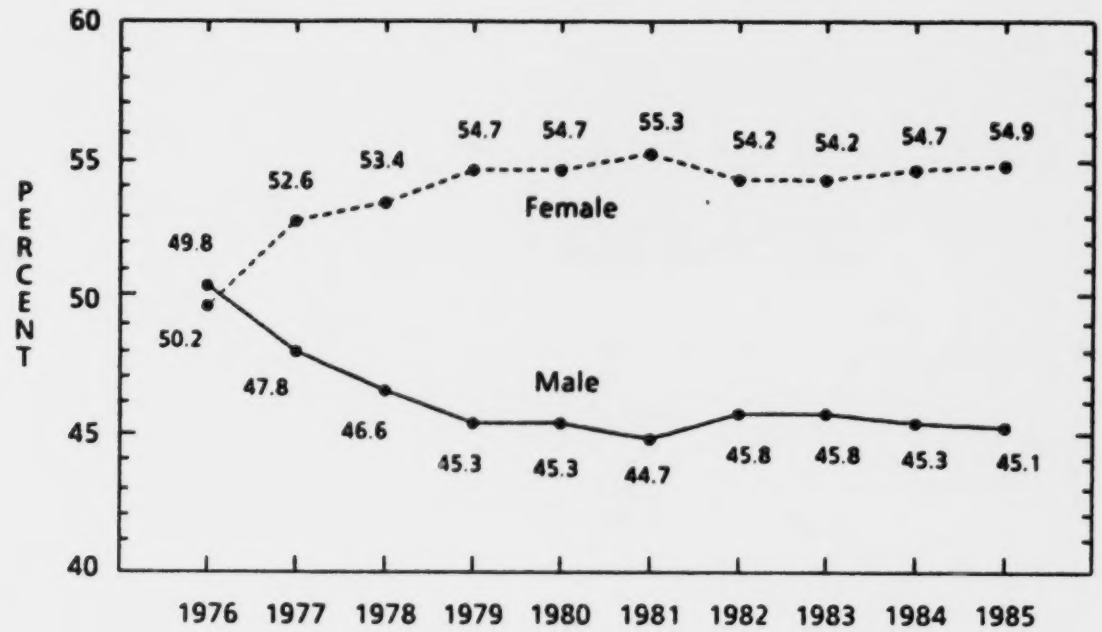
Display 12: Percent of Students Enrolled in Independent Degree-Granting Institutions from Five Major Ethnic Backgrounds, 1976 - 1985

Table 1: Actual and Projected Fall-Term Headcount Total Enrollment in California's Three Segments of Public Postsecondary Education, 1976 to 2000

Table 2: Actual and Projected Fall-Term Undergraduate and Graduate Headcount Enrollment in California State University, 1976 to 2000

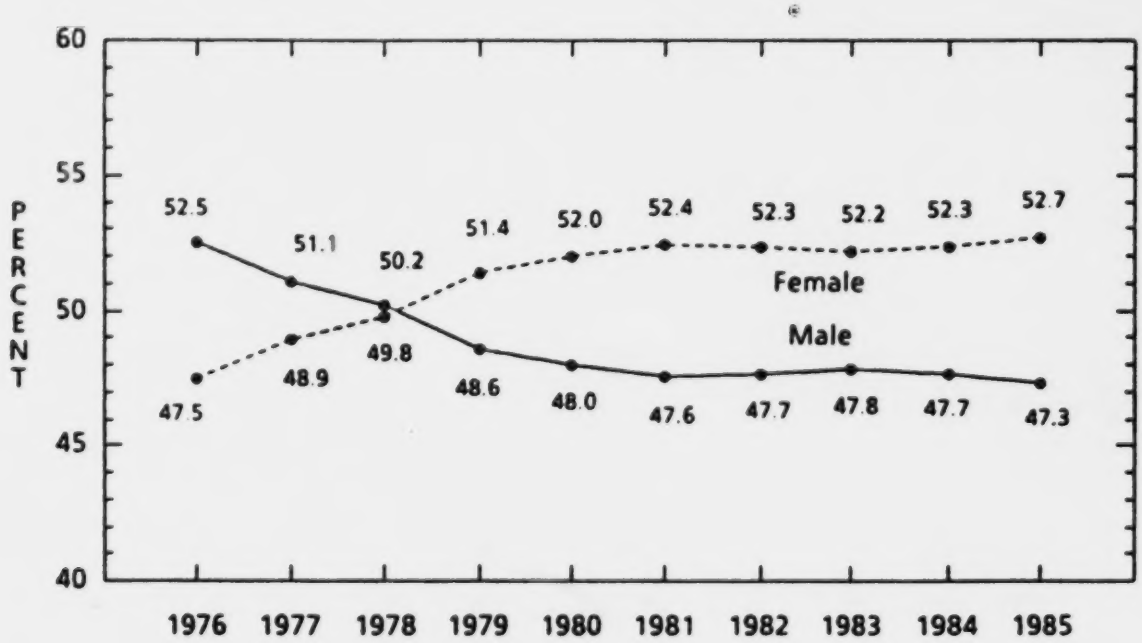
Table 3: Actual and Projected Fall-Term Undergraduate and Graduate Headcount Enrollment in University of California, 1976 to 2000

Display 1 *Percent of Men and Women Enrolled in the California Community Colleges, Fall 1976 -Fall 1985*



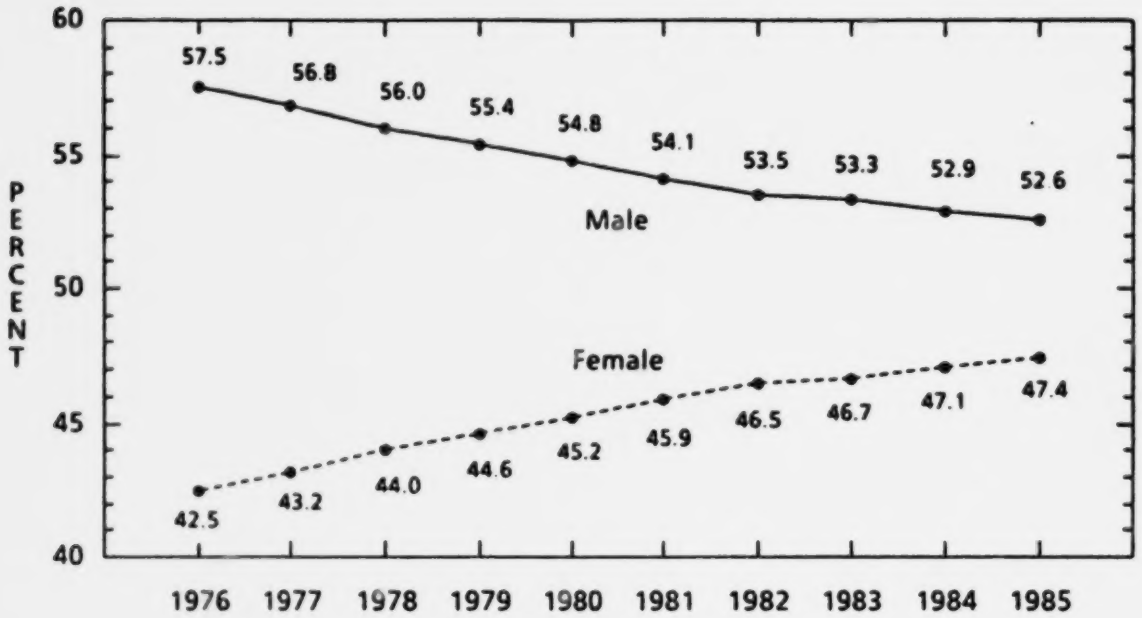
Source: California Postsecondary Education Commission

Display 2 Percent of Men and Women Enrolled in the California State University, Fall 1976 -Fall 1985



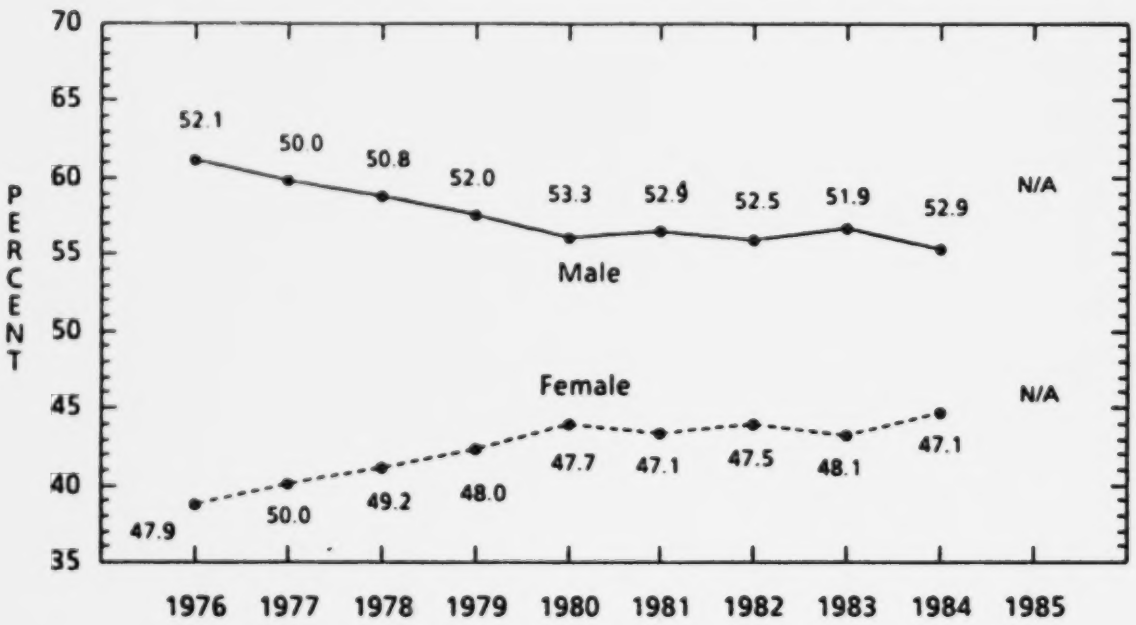
Source: California Postsecondary Education Commission

Display 3 Percent of Men and Women Enrolled in the University of California, Fall 1976 -Fall 1985



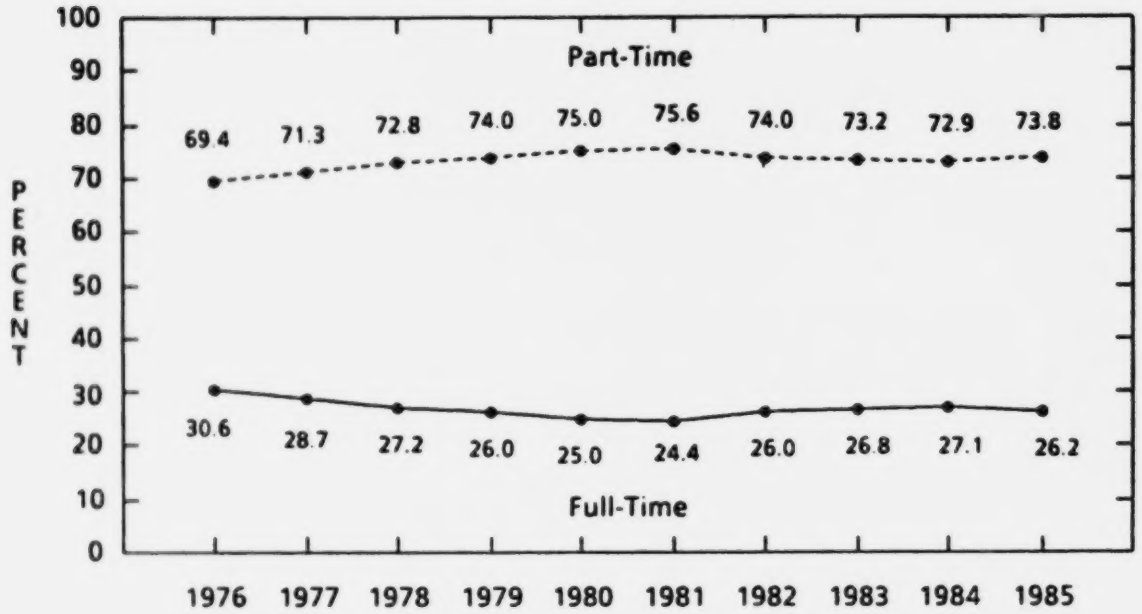
Source: California Postsecondary Education Commission

Display 4 Percent of Men and Women Enrolled in Independent Degree Granting Instituions, Fall 1976 -Fall 1985



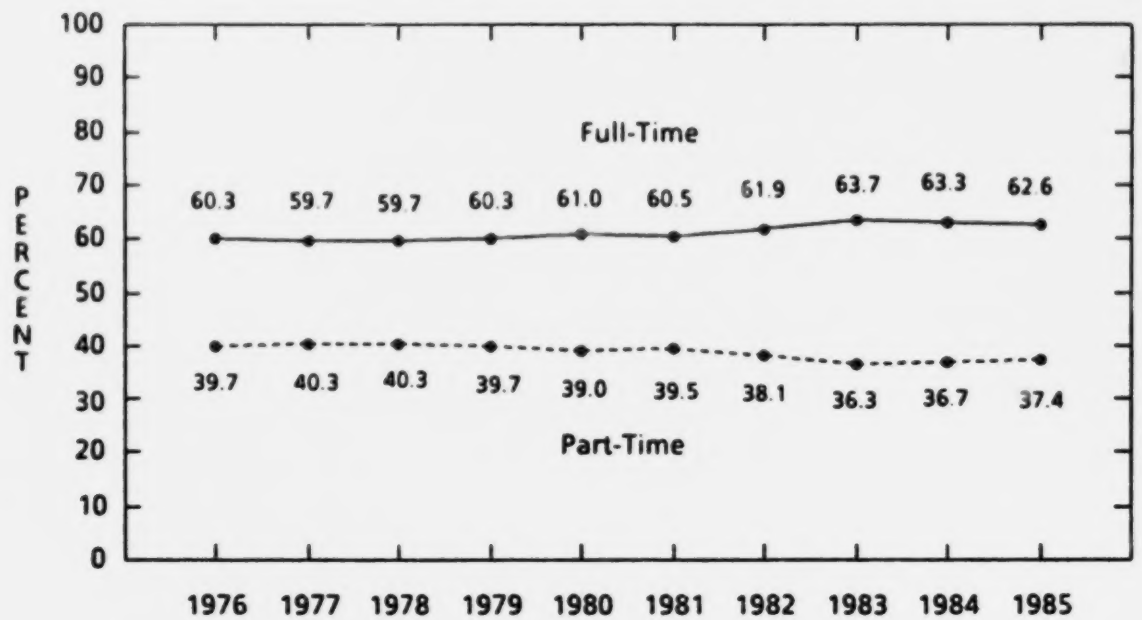
Source: California Postsecondary Education Commission

Display 5 Percent of Full-Time and Part-Time Students Enrolled in California Community Colleges, Fall 1976 -Fall 1985



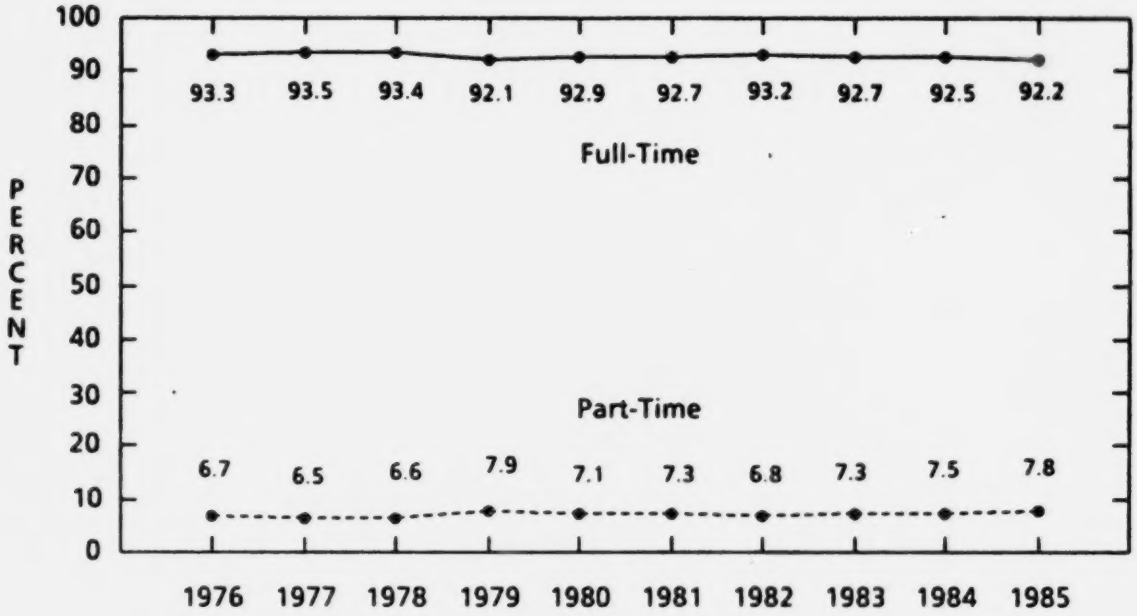
Source: California Postsecondary Education Commission

Display 6 Percent of Full-Time and Part-Time Students Enrolled in the California State University, Fall 1976 -Fall 1985



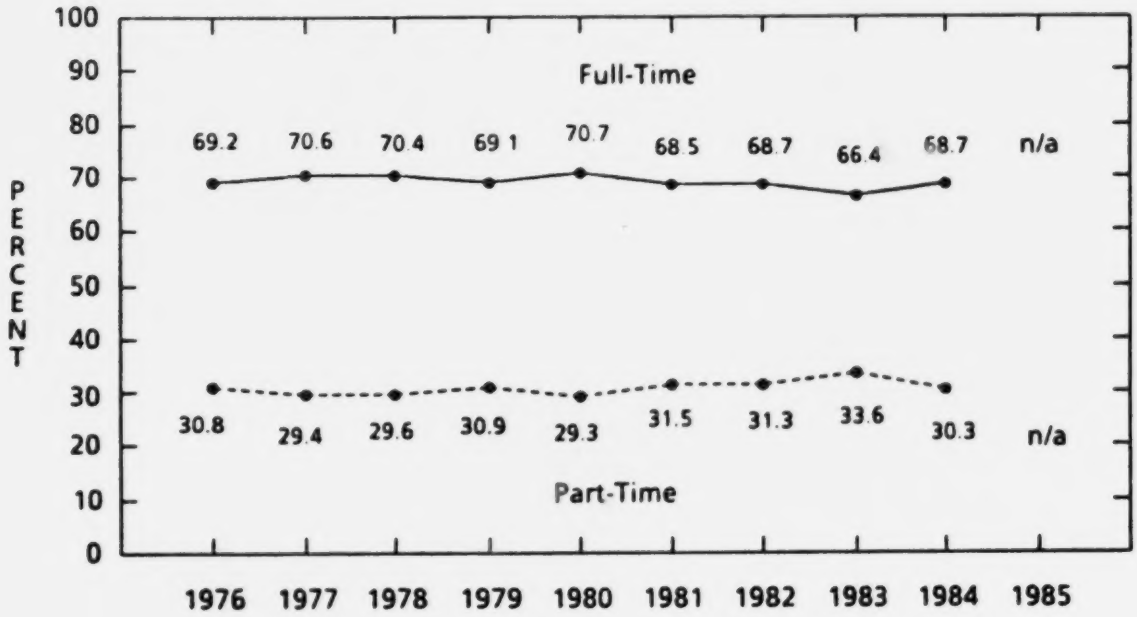
Source: California Postsecondary Education Commission

Display 7 Percent of Full-Time and Part-Time Students Enrolled in the University of California, Fall 1976 -Fall 1985



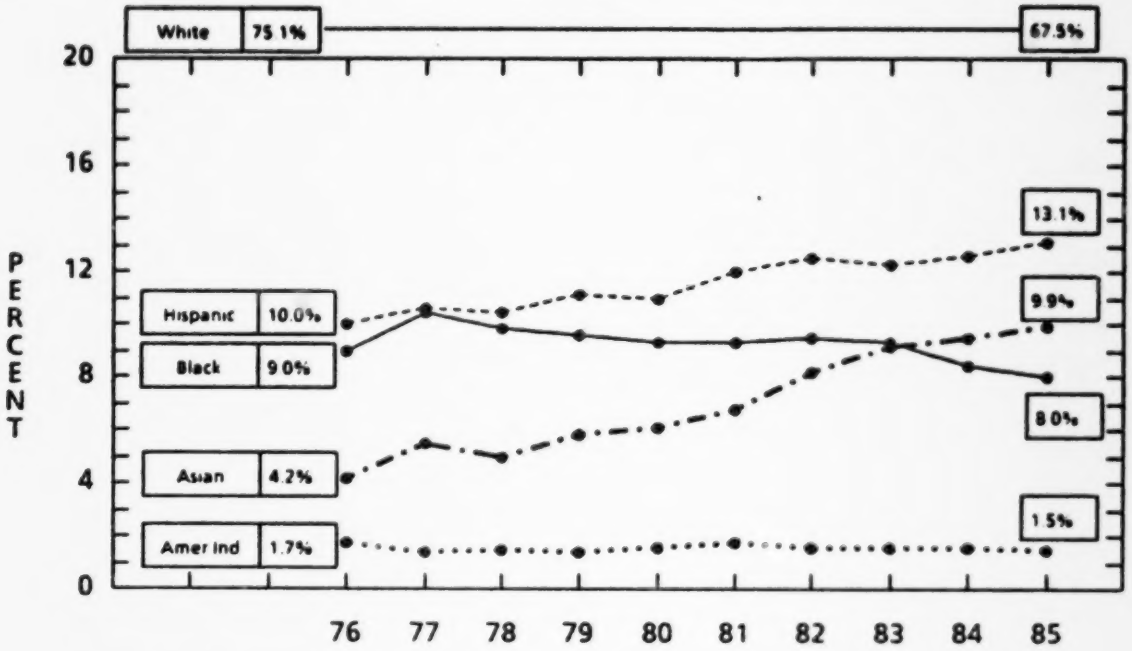
Source: California Postsecondary Education Commission

Display 8 Percent of Full-Time and Part-Time Students Enrolled in Independent Degree Granting Institutions, Fall 1976 -Fall 1985



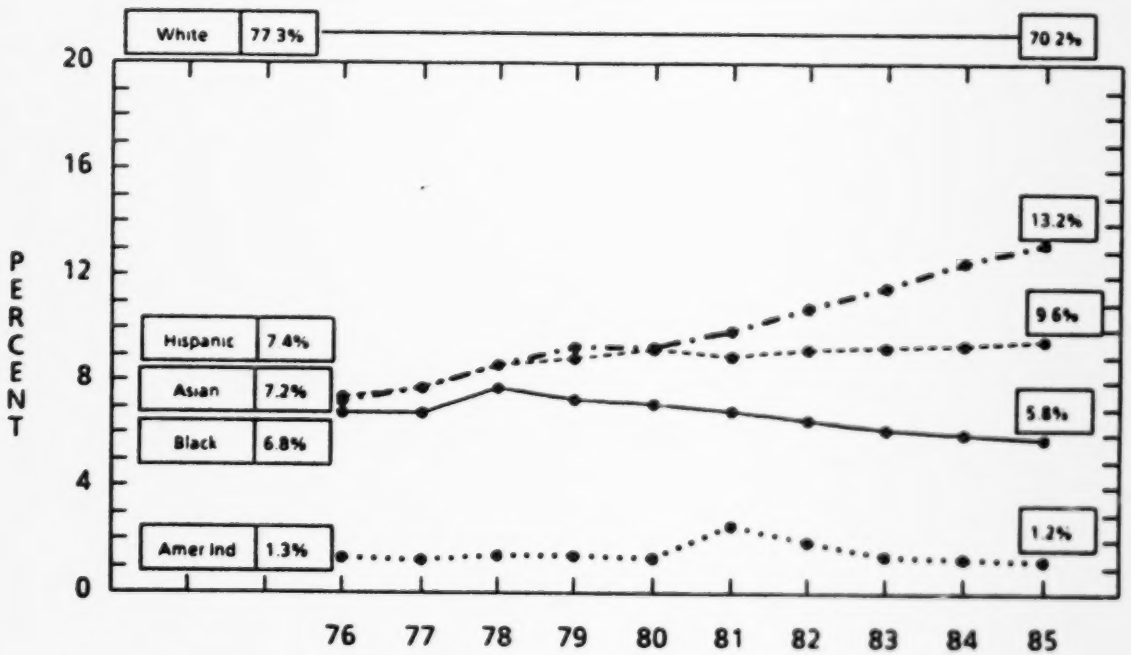
Source: California Postsecondary Education Commission

Display 9 Percent of Students Enrolled in the California Community Colleges from Five Major Ethnic Backgrounds, 1976 - 1985



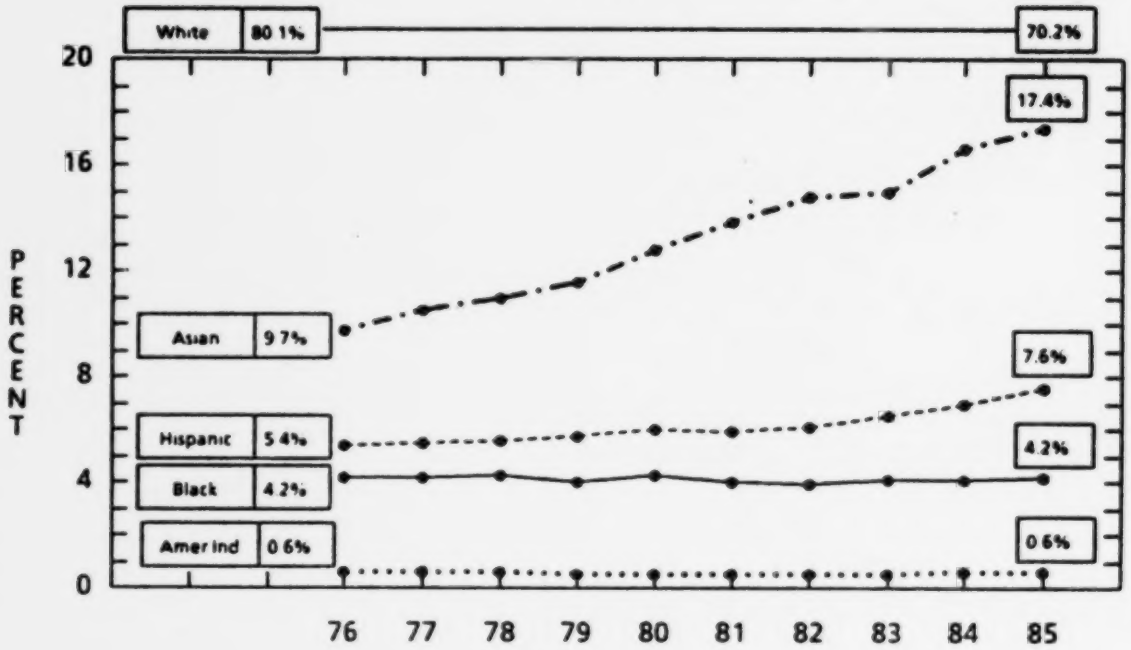
Source: California Postsecondary Education Commission.

Display 10 Percent of Students Enrolled in the California State University from Five Major Ethnic Backgrounds, 1976 - 1985



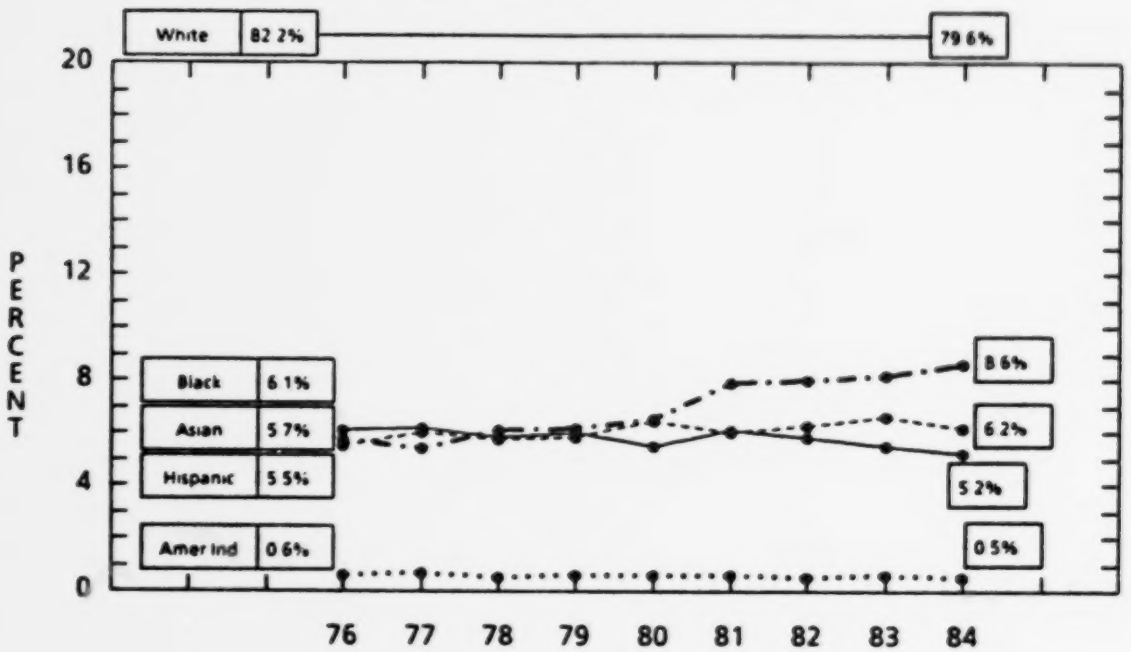
Source: California Postsecondary Education Commission.

Display 11 Percent of Students Enrolled in the University of California from Five Major Ethnic Backgrounds, 1976 - 1985



Source: California Postsecondary Education Commission

Display 12 Percent of Students Enrolled in Independent Degree Granting Institutions from Five Major Ethnic Backgrounds, 1976 - 1984



Source: California Postsecondary Education Commission.

Table 1

Actual and Projected Fall-Term Headcount Total Enrollment in California's Three Segments of Public Postsecondary Education, 1976 to 2000

Year	Community Colleges	1976 Index	California State University	1976 Index	University of California	1976 Index	Total	1976 Index
Actual								
1976	1,255,678	1.000	303,734	1.000	117,460	1.000	1,676,872	1.000
1977	1,321,739	1.053	312,380	1.028	115,024	0.979	1,749,143	1.043
1978	1,159,819	0.924	306,175	1.008	115,641	0.979	1,581,635	0.943
1979	1,248,459	0.984	306,801	1.010	119,168	1.015	1,674,428	0.999
1980	1,384,068	1.102	313,850	1.033	123,251	1.049	1,821,169	1.086
1981	1,430,634	1.139	319,565	1.052	126,071	1.073	1,876,270	1.119
1982	1,344,119	1.070	315,814	1.040	126,538	1.077	1,786,471	1.065
1983	1,243,005	0.990	313,900	1.033	128,981	1.098	1,685,886	1.005
1984	1,117,413	0.890	316,005	1.040	132,360	1.127	1,565,778	0.934
Projected								
1985	1,179,480	0.939	317,700	1.046	133,200	1.134	1,630,380	0.972
1986	1,195,520	0.952	316,000	1.040	132,000	1.124	1,643,520	0.980
1987	1,218,140	0.970	315,400	1.038	131,700	1.121	1,665,240	0.993
1988	1,246,360	0.993	314,900	1.037	132,300	1.126	1,693,560	1.010
1989	1,269,970	1.011	315,100	1.037	131,900	1.123	1,716,970	1.024
1990	1,274,170	1.014	311,000	1.024	128,800	1.097	1.713,970	1.022
1991	1,280,460	1.020	309,000	1.017	126,900	1.080	1,716,360	1.024
1992	1,291,440	1.028	306,700	1.010	125,900	1.072	1,724,040	1.028
1993	1,308,600	1.042	305,500	1.006	126,100	1.074	1,740,200	1.038
1994	1,328,140	1.058	304,300	1.002	126,400	1.076	1,758,840	1.049
1995	1,335,900	1.064	303,200	0.998	126,600	1.078	1,765,700	1.053
1996	1,345,500	1.072	302,900	0.997	127,100	1.082	1,775,500	1.059
1997	1,314,900	1.047	305,300	1.005	128,800	1.097	1,749,000	1.043
1998	1,386,300	1.104	309,900	1.020	132,600	1.129	1,828,800	1.091
1999	1,415,000	1.127	315,700	1.039	137,100	1.167	1,867,800	1.114
2000	1,435,900	1.143	320,700	1.056	140,200	1.194	1,896,600	1.131

Source: State Department of Finance, Population Research Unit

Table 2

Actual and Projected Fall-Term Undergraduate and Graduate Headcount Enrollment in California State University 1976 to 2000

Year	Undergraduate Enrollment	1976 Index	Graduate Enrollment	1976 Index
ACTUAL				
1976	233,862	1.000	69,872	1.000
1977	239,892	1.026	72,488	1.037
1978	238,260	1.019	67,915	0.972
1979	240,884	1.030	65,917	0.943
1980	246,848	1.056	67,002	0.959
1981	251,552	1.076	68,013	0.973
1982	251,137	1.074	64,677	0.926
1983	253,723	1.085	60,177	0.861
1984	256,839	1.098	59,166	0.847
PROJECTION				
1985	258,200	1.104	59,500	0.852
1986	255,900	1.094	60,100	0.860
1987	25,700	1.089	60,700	0.867
1988	253,600	1.084	61,300	0.877
1989	253,100	1.082	62,000	0.887
1990	248,600	1.063	62,400	0.893
1991	246,500	1.054	62,500	0.894
1992	244,300	1.045	62,400	0.893
1993	243,100	1.040	62,400	0.893
1994	241,800	1.034	62,500	0.894
1995	240,500	1.028	62,700	0.897
1996	239,900	1.026	63,000	0.902
1997	242,000	1.035	63,300	0.906
1998	246,400	1.054	63,500	0.909
1999	251,900	1.077	63,800	0.913
2000	256,700	1.098	64,000	0.916

Source: State Department of Finance, Population Research Unit

Table 3

Actual and Projected Fall-Term Undergraduate and Graduate Headcount Enrollment in University of California 1976 to 2000

Year	Undergraduate Enrollment	1976 Index	Graduate Enrollment	1976 Index
ACTUAL				
1976	90,793	1.000	26,667	1.000
1977	89,181	0.982	25,843	0.969
1978	89,946	0.991	25,695	0.964
1979	92,803	1.022	26,365	0.989
1980	96,472	1.063	26,779	1.004
1981	98,547	1.089	27,524	1.032
1982	100,381	1.106	26,157	0.981
1983	103,034	1.135	25,947	0.973
1984	105,779	1.165	26,581	0.997
PROJECTION				
1985	106,300	1.171	26,900	1.009
1986	105,000	1.156	27,000	1.012
1987	104,600	1.152	27,100	1.016
1988	105,000	1.156	27,300	1.024
1989	104,400	1.150	27,500	1.031
1990	101,300	1.116	27,500	1.031
1991	99,400	1.095	27,500	1.031
1992	98,400	1.084	27,500	1.031
1993	98,500	1.085	27,600	1.035
1994	98,800	1.088	27,600	1.035
1995	98,700	1.087	27,900	1.046
1996	98,900	1.089	28,200	1.057
1997	100,200	1.104	28,600	1.072
1998	103,600	1.141	29,000	1.087
1999	107,600	1.185	29,500	1.106
2000	110,000	1.212	29,900	1.121

Source: State Department of Finance, Population Research Unit

BACKGROUND PAPER NO. 3:

FINANCING POSTSECONDARY EDUCATION IN CALIFORNIA: THE POSTSECONDARY ENTERPRISE; TOTAL ANNUAL EXPENDITURES; STATE EXPENDITURES AND THE BUDGET PROCESS; COMPARISONS WITH OTHER STATES; STUDENTS COSTS; STUDENT FINANCIAL AID; COST OF INSTRUCTION.

The Postsecondary Education Enterprise in California

The provision of a strong system of postsecondary education accessible to all qualified residents of the state has long been a major public policy objective in California. Unlike many other states, which have relied heavily upon the development of private institutions, California has pursued this objective primarily by constructing a vast array of public colleges and universities and by continuing to support their operations with large annual appropriations of public funds. It is evidence of the success of this policy that there are now 106 California Community Colleges, 19 California State University campuses, 9 University of California campuses, the California Maritime Academy, and Hastings College of Law, all of which, taken together, enroll more than 1.6 million students in regularly scheduled classes and many thousands more in extension, contract, and other fee-supported programs.

At the same time, the State has encouraged the development of a wide variety of private institutions. These include, (according to the State Department of Education's June 1986 count) 181 accredited degree-granting colleges, universities, and law schools; 194 other degree-granting institutions; 265 accredited nondegree institutions; 1558 approved career schools; and 595 other postsecondary technical and vocational schools of various kinds. Altogether, there are at least 425,000 students enrolled in these private institutions.

In addition, many small and large corporations offer courses and programs for their employees, and many business and professional associations provide similar instructional programs for their members. This may well be the most rapidly growing form of postsecondary education, but there is as yet little data as to its size or scope (Doyle).

Total Annual Expenditures for Postsecondary Education in California

In the absence of reliable statewide data, it is estimated that annual current expenditures for postsecondary education in this state may now exceed $14.2 billion, not counting the "subsistence" costs for the large numbers of day and evening commuter students. This includes approximately $11.2 billion in operating expenditures for the publicly owned institutions and $3 billion for the privately owned institutions.

Table 1: Percentage Distribution of Support for Public Postsecondary Education in California by Source, Budgeted 1986-87

Institutions/Agencies	State and Local Gov't	Federal Gov't	Student Fees	All Other	Totals
Calif. Community Colleges	81%	5%	3%	11%	100%
Calif. State University	68	4	10	18	100
University of Calif.	29	39	5	27	100
Other Institutions and Agencies	51	47	1	1	100
All Institutions and Agencies	48	25	6	21	100

Source: Legislative Analyst, Analysis of the Budget Bill for 1986-87

There is also, of course, an enormous investment in classrooms, laboratories, libraries, faculty offices, playing fields, research facilities, hospitals, and all of the other plant and equipment associated with the vast range of undergraduate, graduate, professional, and technical instruction sought by the more than two million students in both sectors.

As shown in Table 1, the public institutions obtain approximately 48 percent of their total revenues from state and local government sources, 25 percent from the federal government, 6 percent from student fees, and 21 percent from other sources, including reimbursements, hospital fees, endowment earnings, gifts, and sales (Analysis, p.1301). Unfortunately, comparable data for private institutions are not available, but those institutions that provided information for the Higher Education General Information Survey (HEGIS) files for fiscal 1982 reported that 50 percent of their income came from student fees, 18 percent from gifts and endowment earnings, 23 percent from federal and state grants and contracts, and 8 percent from all other sources.*

A Closer Look at State Expenditures and the Budget Process

California currently allocates about 14 percent of its total annual expenditures (16 percent of its General Fund expenditures) to postsecondary education. As shown in Table 2, the Governor's Budget for 1986-87 provides for $5.6 billion in direct support (current expense) for postsecondary education. Of this, $5.4 billion is for institutional support: including $1.9 billion for the California Community Colleges, $1.6 billion for the California State University, $1.8 billion for the University of California, and $17 million for other institutions. A relatively small amount, $149 million, is budgeted for student aid, some of which finds it way back to the institutions through tuition and other fees, as will be discussed below.

*109 private colleges, universities, occupational schools, and other professional and specialized institutions were included in the HEGIS data.

Table 2: Direct State Support for Postsecondary Education, Budgeted 1986-87 (Thousands)

Purpose	General Fund	Special Funds*	Property Taxes	Totals
Institutional Support:				
Calif. Community Colleges	$1,271,712	$ 97,241	$551,100	$1,920,053
Calif. State University	1,611,132	29,334	-	1,640,466
University of Calif.	1,786,927	51,507	-	1,838,434
Other Institutions	17,433	143	-	17,576
Subtotals	$4,687,204	$178,225	$551,100	$5,416,529
Student Aid	120,428	28,453	-	148,881
Postsec. Educ. Commission	3,871	-	-	3,871
Totals	$4,811,503	$206,678	$551,100	$5,569,281

Notes: *Includes lottery revenues capital outlay funds, and other state appropriations.
Source: Governor's Budget, 1986-87.

The greater part of this support, $4.8 billion, is to be appropriated from the State's General Fund. Special funds, including lottery revenues, account for only $207 million, and local property tax revenues, all of which go to the community colleges, account for $551 million. (Although property tax revenues are technically local rather than state revenues, they are applied in a manner that makes them state revenues for nearly all practical purposes.)

The Governor's Budget also includes $276 million in direct state expenditures for capital outlay for postsecondary education, as shown in Table 3. These expenditures are budgeted for a broad range of facilities, including classrooms, libraries, laboratories, instructional equipment, and faculty offices, as well as for rehabilitation, utilities, and other purposes. A large percentage of the budgeted capital outlay for the California State University and the University of California is to come from the High Technology Education Revenue Bonds authorized by the Legislature in 1983. Under this law, the Public Works Board is authorized to issue bonds and other debt instruments to pay for the construction of instructional and research facilities for engineering, computer science, biological sciences, and related sciences for the Community Colleges, CSU, UC, and the Maritime Academy. The board leases or lease-purchases the facilities to the systems and the base revenue is pledged to the payment of the principal and interest on the construction debt. Similar legislation in 1984 made such financing available for library and library related facilities, as well.

Table 3: Direct State Capital Outlay for Postsecondary Education, Budgeted 1986-87 (Thousands)

	COFPHE*	HTER** Bond Funds	Other*** Funds	Totals
Calif. Community Colleges	$23,799	$ -	$ 5,730	$ 29,529
Calif. State University	26,327	62,338	17,359	106,024
University of Calif.	34,939	103,033	1,984	139,956
Calif. Maritime Academy	365	-	-	365
	$85,430	$165,371	$25,073	$275,874

Notes: *Capital Outlay Fund for Public Higher Education
**High Technology Education Revenue Bond Funds
***Federal Trust Fund (Petroleum Violation Act) and Public Building Construction Fund
Source: Legislative Analyst, Analysis of the Budget Bill for 1986-87.

Over the two and one-half decades since the writing of the 1960 Master Plan, the State has committed between 12.8 and 17.6 percent of its total General Fund revenues to current support for postsecondary education, as shown in Table 4. The rise in this figure through the 1960's undoubtedly reflects the rapid increase in enrollment at that time. As enrollment growth slowed and Proposition 13 forced an increase in State spending to replace local property tax revenues for local government and the public schools, as well as for the Community Colleges, the proportion of General Fund spending for postsecondary education declined and then stabilized at 15-16 percent.

Budget Process

State support for the public four-year institutions is determined through a process that begins approximately 18 months before the start of the budget year (CPEC, Financing, p.53). At that time, statewide budget staff for UC and CSU begin building the proposed budgets for each system in meetings with campus officials. Eventually the staff draw up for approval by the Regents and the Trustees their proposals for state funding for the "baseline" budgets plus proposed augmentations. These then go to the Department of Finance and Governor, who usually reduce the proposals somewhat before incorporating them in the Governor's Budget for the next fiscal year.

In each case, the budgets are drawn up according to a detailed program classification structure that includes the principal components of instruction, research, public service, academic support, student services, institutional support, systemwide offices and programs, and other operating elements. The greater part of each "baseline" budget is related directly to enrollment, through overall faculty staffing ratios, and price changes. Augmentation must be justified according to proposed program changes. Proposed state support for the "baseline" and change proposals are consolidated, however, into a small number of "line items" in the Budget Bill that goes to the Legislature for its review.

Table 4: State General Fund Support for Postsecondary Education Compared with Total General Fund Expenditures, 1959-60 to 1986-87 (Millions)

Year	Total General Fund Expenditures	General Fund Expenditures for Postsecondary Education Amount	% of Total
1959-60	$ 1,435	$ 183	12.8%
1964-65	2,345	360	15.4
1969-70	4,456	759	17.0
1974-75	8,349	1,473	17.6
1979-80	18,534	2,800	15.1
1984-85	25,722	4,080	15.9
1985-86 (est.)	28,700	4,472	15.6
1986-87 (bud.)	30,699	4,812	15.7

Source: Governor's Budgets and Postsecondary Education Commission reports.

State support for the Community Colleges, on the other hand, is determined according to the statutory formulas contained in the Education Code -- with the exception of support for the Board of Governors and several statewide programs, which are budgeted in much the same way as support for UC and CSU (Background Papers, Challenge of Change, p.105). Any major changes in the level of state support to be provided the Community Colleges must be accomplished, at present, through changes in the Education Code formulas.

Once the Legislature has reviewed the proposed Budget Bill and reduced or increased specific items according to its wishes, and the Governor has accepted or rejected ("blue penciled") any increases, their support is appropriated to the systems for distribution among the institutions. Here the Community Colleges again differ from CSU and UC. At present, support for the Community Colleges is distributed among the districts according to the statutory formula. The districts then allocate that support among the individual colleges according to the detailed budgets approved by the district governing boards.

For the University of California and the California State University, this allocation takes place, for the most part, at the statewide office level. Detailed allocation formulas, which are very different from those used to build and justify the proposed support budgets, govern the allocation to each campus and to each activity on each campus. Thus there is a great deal of centralized fiscal management for the four-year institutions that does not exist for the community colleges above the district level.

State funding for capital outlay, on the other hand, is much the same for all three segments and is based upon a series of steps from preparing a campus master plan through review of preliminary project plans at the state level to appropriation of the actual construction funds. Each segment maintains an inventory of its facilities and useable space, and most of the state-funded space is subject to utilization standards, although these standards have been changed from time to time and are currently under study by CPEC at the direction of the Legislature. Only the University of California is now developing a long-range capital outlay plan; planning for California State University is limited to five years, and planning among the Community Colleges varies from district to district as the Chancellor's Office seeks to develop a system that will permit it to project capital needs for all colleges over a 25-year plan (Bowen, pp.28-29).

Comparisons with Other States

Although all of the 50 states have substantial public and private post-secondary education sectors, they differ considerably as to the size and scope of their public sectors, reliance upon tax revenues rather then student charges for their support, the level of current spending per student, their mix of public and private institutions, and other factors. California has long stood out among the other states for its commitment to a large and broadly based public sector and to low student charges as a means of maximizing education opportunity.

Among the several sources of comparative data regarding state financing for postsecondary education, the most comprehensive and useful have been those prepared by the National Center for Higher Education Management Systems (NCHEMS) and published periodically by the National Institute of Education and those published annually by Research Associates of Washington.

According to the latest NCHEMS figures, which are for 1981-82, California leads all other states by a large margin in total full-time-equivalent (FTE) enrollment and is tied with four other states for third in FTE enrollment per 1,000 of population. In terms of expenditures, California ranked fifth among all states and first among the six largest states in the allocation of state and local support per capita to higher education (public and independent colleges and universities) in 1981-82, but twentieth among all states and fourth among the six largest states in state and local appropriations per FTE student in public institutions.

The more recent data reported by Research Associates of Washington (State Profiles: Financing Public Higher Education, 1985-86), shown in Table 5, place California seventh among all states in state and local revenues for education per FTE student at public insitutions, fifth in the share of total tax appropriations allocated to public institutions, and forty-eighth in reliance upon tuition and fees for public institution support.

Table 5: California's Ranking Among All States and the Six Largest States According to Selected Measures of Expenditure for Postsecondary Education, 1985-86.

Comparative Measures	Ranking Among All States	Ranking Among Six* Largest States
1. State and local tax appropriations for education per FTE at public institutions**	7	2
2. Share of state and local tax appropriations allocated to institutional support	5	1
3. Tuition and fees as a percentage of institutional support from tax appropriations and tuition and fees	48	6

Notes: *California, Texas, New York, Pennsylvania, Illinois, and Florida
**Excludes expenditures for sponsored research, agriculture, public health service, and medical schools.
Source: State Profiles: Financing Public Higher Education 1985-86, Kent Halstead, Research Associates of Washington, 1986.

A Closer Look at Student Costs

The cost of obtaining postsecondary education is usually considered to include not only tuition and other required fees, but other "out-of-pocket" expenses such as room and board, books and supplies, travel to and from the campus, and other living costs associated with full- or part-time attendance. A broader definition of cost includes, in addition, the income foregone by a student who chooses education over employment for some period of time. In practice, however, this "opportunity cost" (which may or may not be offset by increased future earnings) is usually ignored because of the difficulty of estimating its magnitude.

The figures in Table 6 indicate estimated average costs of attending public and independent institutions in California in 1985-86, including average tuition and other fees and average "student expense budgets" developed by the Student Aid Commission to cover other "out-of-pocket" costs. Inasmuch as the Student Aid Commission assumes that such costs do not vary significantly across segmental lines, differences in costs are related directly to differences in tuition and other fees and to living arrangements.

California has a long tradition of charging very low fees for attendance by California residents at its public colleges and universities. In 1899, when the Regents of the University of California voted to charge tuition, the Governor intervened to persuade them to rescind that action. To this day, none of the segments charges what it will acknowledge to be tuition, although the Community Colleges' mandatory enrollment fee can be said to provide support for instructional costs, which is the commonly accepted definition of tuition. In general, the Legislature has resisted efforts by the Governor and the governing boards to raise income through tuition charges for California residents, in keeping with the position of the 1960 Master Plan Survey Team that "tuition-free higher education is in the best interest of the State and should be continued." (Master Plan, p.173).

Table 6: Average Cost of Full-Time Attendance at a Public and Independent Colleges and Universities in California for a Single, Dependent, Undergraduate Student, 1985-86.

Residence	CCC	CSU	UC	Indep.
Living on campus				
Fees	100	573	1,326	7,700*
Other expenses	1,845	1,845	1,845	1,845
Total	1,945	2,418	3,171	9,545
Living off campus				
Fees	100	573	1,326	7,700*
Other expenses	5,940	5,940	5,940	5,940
Total	6,040	6,513	7,266	13,640
Living at home				
Fees	100	573	1,326	7,700*
Other expenses	3,170	3,170	3,170	3,170
Total	3,270	3,743	4,496	10,870

Note: *Average tuition and fees paid by Cal Grant A recipients attending independent institutions.
Sources: Student Aid Commission and Legislative Analyst

At the same time, the Legislature has maintained, as did the Survey Team, that students should pay fees "sufficient to cover the operating costs of services not directly related to instruction" (Ibid.) and that nonresident students should pay full tuition. Thus UC and CSU students are required to pay fees to cover the costs of registration, health services, student activities, counselling, intercollegiate athletics, parking, and other services as well as campus food and housing services. UC students also contribute to student aid funds. Prior to 1984, Community College students paid for student services through a number of "permissive" fees that local boards were authorized to charge. Since 1984, they have paid a single, uniform fee that is intended to cover the cost of many of these services. In all three segments, students who are not California residents must pay tuition as calculated by the segmental governing boards.

The state's policy of low fees for resident students has been challenged from time to time when state revenues have appeared to be inadequate to support institutional costs at existing levels. Thus in 1982, the Legislature directed CPEC (ACR 81, 1982) to conduct a study of student fees and state financial support for postsecondary education. Upon receipt of the report of that study, the Legislature increased UC and CSU fees significantly, but continued to debate the proper level and purpose of student fees.

In 1984, the Legislature, seeking to establish a long-term student fee policy, directed the California Postsecondary Education Commission (CPEC) to work with segmental representatives and others to develop recommendations for such a policy. The policy that was recommended to the Legislature in response to this directive stated generally that fees should remain low and that any increases should be "gradual, moderate, predictable, and... equitable among the students in each segment." (Principles, p.3). More specifically, the report stated that fee levels should be indexed to three-year moving averages of State support, should not be raised or lowered by more than 10 percent in any year, and should be announced at least 10 months prior to the fall term of each year. This policy was adopted by the Legislature and signed into law by the Governor in 1985, but it remains to be seen whether it will be implemented in the annual budgets.

The state's private colleges and universities come much closer to "full-cost pricing" than do the public institutions, with the result that the difference in cost between attending a public and a private institution has continued to grow over the years. The independent institutions have seldom argued that this difference should be reduced by increasing fees charged by public institutions, but they have long sought to have state student financial aid increased so that the impact of the cost differential is minimized for low-income students.

Student Financial Aid

Student financial aid serves two principal purposes. It is a means of discounting the "posted" (direct) price of attending a private institution and of further reducing the already discounted price of attending a public institution for selected students. It is also a means of reducing a student's living expenses while enrolled in a postsecondary institution. Student aid (price discounts) may be allocated by institutions, public agencies, or private organizations to attract low-income students, students with desired talents, students of high academic achievement, students who have served or promise to serve in some public employment, and others.

Student financial aid comes in several forms: grants, fee waivers, access to on-campus and off-campus employment, and loans with subsidized interest rates or forgiveness, or both. Since World War II, the federal government has been the principal source of student financial aid through social security survivors benefits, veterans benefits, military enlistment bonuses, ROTC programs, Pell Grants for low-income students, work-study support, and loan guarantee payments. As federal student aid has been reduced, in recent years, however, state programs have become increasingly important. California now offers 13 state-supported aid programs: Cal Grant A, which is by far the largest, Cal Grants B and C; Graduate Fellowships; Bilingual Teacher Training grants; CAL-SOAP; Law Enforcement Dependents Program; Assumption Program of Loans for Education; Educational Opportunity Programs and Services; State University Grants; University Financial Aid; and the Community College Board Financial Assistance Program (see Appendix). In addition, nearly all public and private institutions offer aid programs of their own as they compete for students with certain characteristics or talents, and many private organizations and firms also provide aid to certain students.

Current federal, state, and institutional aid in California is summarized in Table 7. These figures clearly indicate the extent to which student financial aid has become dominated by guaranteed loans provided by private lending institutions. A dozen years ago, loans amounted to only 25 percent of all aid; today they are 50 percent. Grants, which amounted to nearly two-thirds of all aid, are now about 43 percent. It should be noted, however, that these figures almost certainly underestimate employment as a source of student aid. It has been reported recently that half of all college students held jobs during the 1985-86 academic year (Kipp, p. 12).

Undoubtedly, this aid has had and continues to have an important influence on enrollments at private institutions, enabling many more students to attend independent colleges and universities and proprietary schools than would otherwise be the case. Its impact on the distribution of students of exceptional academic achievement or other talents is less clear, however, as is its impact on the enrollment of low-income students.

A Closer Look at Institutional Costs

Surprisingly to many who have not dealt with the matter, reliable data regarding the cost of educating each student in a public or private institution remain elusive. It is possible to divide total state support for each segment by total enrollment (FTE or ADA) and arrive at an average cost per student of $2899 for the Community Colleges, $6617 for CSU, and $13,260 for UC for 1986-87, although such figures are not at all useful for comparative purposes. Alternatively, it is possible to calculate the marginal cost to the state of each additional undergraduate student, which, according to the Legislative Analyst, will be $1,716 for the Community Colleges, $3,291 for CSU, and $4,356 for UC in the current year. These figures are said to include faculty salaries and benefits (derived from budget formulas rather than actual staffing patterns), support costs, and certain library operating expenses. They reportedly exclude the costs of research and all noninstructional expenses. The usefulness of such figures for comparative purposes is diminished substantially when it is understood that they reflect very different mixes of academic and occupational instruction and, for CSU and UC, include lower division, upper division, and graduate instruction costs.

Over the past 22 years, there have been numerous attempts to develop more reliable cost figures for each level of instruction and by program category. The first major effort was the California Public Higher Education Cost and Statistical Analysis, which was begun by the Coordinating Council for Higher Education in 1963. This was "the first major effort of any state to design and produce a comprehensive study of the costs of higher education on its public institutions" (CPEC, 1980, p.13), and it produced by far the best analytical data on instructional costs then available. Questions of methodology regarding matters such as program classifications and the allocation of faculty salary costs limited its usefulness, however, and it was halted in 1966 when interest shifted to the development of program budgeting.

The effort was revived in 1971 in response to Senate Concurrent Resolution 105 using methodology developed for the Western Interstate Commission on Higher Education by the National Center for Higher Education Management Systems (NCHEMS). Three annual reports were published (1972, 1973, 1974) focusing upon the implementation of the NCHEMS program classification system, but the work came to a halt once more when the Coordinating Council was replaced by CPEC in 1974.

In 1979-80, the Legislature directed CPEC to again seek to develop "comparable costs of...instruction, by major disciplines and level of instruction, and...support services, in the three public higher education segments..." (Analysis, 1979-80). The feasibility study undertaken by CPEC resulted in a report in 1980 outlining alternative ways in which such data might be collected and recommending that interested state agencies choose among them, while cautioning that the data would be of limited utility to fiscal planners and budget review agencies. CPEC also reported that the initial cost of developing the data would be $4 million to $10 million and $1.2 to $4.8 million per year thereafter. To date, no action has been taken on the CPEC recommendations.

Table 7: Student Financial Assistance in California, 1985-86 (Thousands)

Segment/Aid	State	Federal	Instit.	Other**	Total
California Community Colleges:					
Grants	$ 24,502	$ 52,114	$ 2,116	$ 2,029	$ 80,761
Fee Waivers	-	-	-	-	-
Loans	45	2,484	1,080	60,223	63,832
Employment	803	11,493	14,574	3,737	30,607
Totals	$ 25,350	$ 66,091	$ 17,770	$ 65,989	$ 175,200
California State University:					
Grants	$ 36,714	$ 67,113	$ 2,285	$ 9,048	$ 115,160
Fee Waivers	-	-	2,513	-	2,513
Loans	-	11,451	1,480	118,000	130,931
Employment	-	8,562	15,760	627	24,949
Totals	$ 36,714	$ 87,126	$ 22,038	$127,675	$ 273,553
University of California:					
Grants	$ 20,523	$ 49,813	$ 57,600	$ 12,300	$ 140,236
Fee Waivers	-	-	7,200	-	7,200
Loans	-	14,700	13,400	90,600	118,700
Employment	-	9,900	2,500	-	12,400
Totals	$ 20,523	$ 74,413	$ 80,700	$102,900	$ 278,536
California Independent Colleges and Universities:					
Grants	$ 59,158	$ 36,239	$121,512	-	$ 216,909
Fee Waivers	-	-	1,189	-	1,189
Loans	-	18,841	12,213	196,000	227,054
Employment	-	13,840	15,465	-	29,305
Totals	$ 59,158	$ 68,920	$150,379	$196,000	$ 474,457
Proprietary & Other Schools:					
Grants	$ 9,902	$ 70,194*	-	-	$ 80,096
Fee Waivers	-	-	-	-	-
Loans	-	3,979*	442	186,500	190,921
Employment	-	1,175*	294	-	1,469
Totals	$ 9,902	$ 75,348	$ 736	$186,500	$ 272,486
Totals, All Segments:					
Grants	$150,799	$275,473	$183,513	$ 23,377	$ 633,162
Fee Waivers	-	-	10,902	-	10,902
Loans	45	51,455	28,615	651,323	731,438
Employment	803	44,970	48,593	4,364	98,730
Totals	$151,647	$371,898	$271,623	$679,064	$1,474,232

Notes: *1983-84 and 1984-85 data
**Principally Guaranteed Student Loans
Source: Legislative Analyst, Analysis of the Budget Bill for 1986-87

The principal obstacle to the development of reliable instructional cost data at a reasonable price is the problem of allocating faculty time (the largest single cost element) among programs and levels of instruction - not only classroom time but preparation and administrative time, as well. This can only be accomplished be on the basis of extensive surveys of the faculty themselves, an extremely costly process that has been met with considerable resistance in the past. There are also important questions as to what such data will tell fiscal analysts that they cannot now surmise from existing salary, work load, and class size data. Thus there has been little real progress in this area in many years.

Resource Requirements in the Year 2000

Long-range cost projections are notoriously unreliable. In 1959, the Master Plan Survey Team estimated that required state support for the public colleges and universities would nearly double by 1975, according to its "modified" enrollment projections for the three segments. As it happened, state support quadrupled, suggesting once more that projections of such costs over a period of more than a few years cannot be taken very seriously.

Nevertheless, as enrollment projections for the balance of this century are improved, the Commission staff will attempt to project state support and capital outlay costs to the year 2000. It will do so, however, not in the expectation that such projections will prove to have been accurate but only for the purpose of indicating the order of magnitude by which resource requirements are likely to grow if California is to maintain the kind of postsecondary education system envisioned in the new Master Plan.

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APPENDIX

State Student Financial Aid Programs*

1. Program: Cal Grant A - Scholarships.

   Year Began: 1955

   Purpose: Grants, based upon need and scholarship, for tuition and other fees at a public and private four-year institutions.

   Administration: California Student Aid Commission.

   1986-87 Funding: $75.5 million for 44,487 awards.

2. Program: Cal Grant B - College Opportunity Grants.

   Year Began: 1969

   Purpose: Grants based upon need, scholarship, parental education, family size, and student objectives for tuision, fees, and subsistence costs. For students attending public community colleges.

   Administration: California Student Aid Commission.

   1986-87 Funding: $35.6 million for 24,760 awards.

3. Program: Cal Grant C - Occupational Training Grant Program.

   Year Began: 1973

   Purpose: Grants to needy students enrolled in vocational training programs generally four months to two years in length with priority for occupations in which there is a shortage of trained personnel.

   Administration: California Student Aid Commission.

   1986-87 Funding: $3.5 million for 2,455 awards.

4. Program: Graduate Fellowships.

   Year Began: 1965

   Purpose: Grants to cover a portion of tuition and fees at public and private institutions.

   Administration: California Student Aid Commission.

   1986-87 Funding: $3.0 million for 900 awards.

*Sources: California Postsecondary Education Commission, Governor's Budget, Legislative Analyst, and California Student Aid Commission.

5. Program: Bilingual Teacher Grant Program.

   Year Began: 1975

   Purpose: Grants to needy students seeking training to become bilingual teachers.

   Administration: California Student Aid Commission.

   1986-87 Funding: $2.5 million for 766 awards.

6. Program: Assumption Program of Loans for Education.

   Year Began: 1984

   Purpose: Authorizes Student Aid Commission to assume up to 500 loans of college students pursuing teaching credentials so as to increase the supply of teachers in fields of mathematics, science, and "other critical shortage areas."

   Administration: California Student Aid Commission.

   1986-87 Funding: $110,000 for up to 500 loan assumptions.

7. Program: California Student Opportunity And Access Program (CAL-SOAP).

   Year Began: 1979

   Purpose: To help financially disadvantaged student enter higher education and to transfer from a community college to a four-year institution.

   Administration: California Student Aid Commission and project consortia.

   1986-86 Funding: $522,000 for 7 projects.

8. Program: Extended Opportunity Programs and Services.

   Year Began: 1968

   Purpose: Grants, counseling, and tutorial services for disadvantaged students.

   Administration: California Community Colleges.

   1986-87 Funding: $30 million.

9. Program: Board of Governors Financial Assistance Program.

Year Began: 1984

Purpose: Fee waivers for low income and other students.

Administration: California Community Colleges.

1986-87 Funding: $9.2 million for 206,520 awards.

10. Program: Educational Opportunity Program.

Year Began: 1968

Purpose: Grants, Counseling, and tutorial services for disadvantaged students.

Administration: California State University.

1986-87 Funding: $19.5 million for grants and services to 14,747 students.

11. Program: Law Enforcement Dependents Program.

Year Began: 1979

Purpose: Grants to dependents of law enforcement officers or public officials killed or permanently disabled in the line of duty.

Administration: California Student Aid Commission.

1986-87 Funding: $14,000 for 9 grants.

12. Program: California State University Grants.

Year Began: 1982

Purpose: Financial aid, counseling, and related services for CSU students.

Administration: California State University.

1986-87 Funding: $27.6 million (State General Fund).

13. Program: University Student Aid Program.

Year Began: 1971

Purpose: Assistance for financially needy undergraduates and graduate students.

Administration: University of California.

1986-87 Funding: $12 million (State General Fund).

BACKGROUND PAPER NO. 4:

WHAT POSTSECONDARY EDUCATION OFFERS IN CALIFORNIA: THE ENORMITY OF THE ENTERPRISE; DEGREES AWARDED; NONCREDIT "ADULT" EDUCATION; VOCATIONAL EDUCATION AND EMPLOYMENT TRAINING; RESEARCH; PUBLIC SERVICE.

The Enormity of the Enterprise

The California Postsecondary Education Commission has defined postsecondary education as "any instruction offered to those who have graduated from high school or who are at least 18 years old." Postsecondary education thus refers:

> "to all education beyond secondary school without reference to level of offering or student qualifications; it may be for credit or no credit; it may be a curriculum leading to a collegiate degree or a short-term program for which no certification of any kind is granted. It includes education, continuing education, lifelong learning, and community education in nonacademic organizations and agencies. Postsecondary education is distinguished from other learning in that it (1) is organized or formal, and (2) occurs beyond secondary education" (CPEC Background Papers, p.237).

Within this definition, one sees the enormity of the American postsecondary enterprise in terms of both sheer size and diversity. It has been estimated that postsecondary education represents an annual expenditure of at least $100 billion, or approximately 2.5 percent of the gross national product (CPEC Background Papers, p.240). These expenditures range from multibillion dollar research universities where instructional costs are but a small part of total expenditures, to private vocational schools where instruction constitutes almost the entire budget. Students' time commitments can range from 11 years for prospective doctors (a four year undergraduate program plus seven years beyond the bachelor's) to an evening program on swimming pool maintenance.

In California alone, the size and diversity of the postsecondary educational effort is almost staggering. It is estimated that current annual expenditures for postsecondary education exceed 14.2 billion, including over $11 billion in the public sector (MPC Background Paper #3, p.37). By 1985, between 2.5 and 3 million California students were enrolled in one facet or another of the system including 1.7 million in college and university degree-granting programs, approximately one-half million in noncredit offerings from the colleges and universities, and another one-half million enrolled in postsecondary proprietary schools (MPC Background Paper #2).

More than 56 percent of California's high school graduates enter into California colleges and universities in the fall term immediately after graduation. Currently, the state's colleges enroll one out of every 12 California adults directly in credit courses.

The range and diversity of both the institutions offering programs and the actual courses themselves are quite extraordinary. There are over 500 degree-granting colleges and universities, including 106 public Community Colleges, 19 California State University campuses, 9 campuses of the University of California, 181 accredited private colleges, universities, and law schools, and 194 private nonaccredited degree-granting institutions.

However, degree-granting institutions -- those we generally think of as "higher" education -- do not begin to tell the entire story. There are also 652 accredited and 1,588 approved nondegree-granting institutions including private vocational or technical schools of various kinds. In addition there are 67 publicly funded Regional Occupational Centers, and other adult education programs are offered through 223 of the state's public school districts. Noneducational institutions such as business, the military, government, and labor unions also offer an extensive array of inservice training or education programs.

Prospective students can literally choose from thousands of programs offering a variety of courses from soup (cooks and bakers apprenticeships/ food service management/food service technology) to nuts and bolts (air frame-power plant maintenance technology/appliance maintenance/ automotive body and fender repair). There are degree or certificate offerings ranging from astronomy to apparel and accessories distribution to avian science; from classical Greek to coppersmith apprenticeship; from dramatic arts to drywall installation; from English to exotic wildlife management; from mortuary science to metallurgical technology; from parent training to political science; from ski patrol training to street maintenance (Guide to California Colleges and Universities). There are countless additional programs in nondegree-granting institutions ranging from black jack dealer to cosmetology, income tax preparation, retail cashier, shipping clerk, solar management, orthopedic technician, etc. There are also numerous avocational/recreational programs (generally fee-based) offered through a wide variety of public and private agencies.

Degrees Awarded

Of the 1.7 million students enrolled in degree-granting postsecondary institutions, approximately 180,000 receive degrees each year (all but about 3,000 of which are awarded by accredited institutions). These include bachelors', masters', Ph.D.s', a variety of first professional degrees, and a few others.

At the undergraduate level, the large majority of degrees are given in the public sectors. Of almost 51,000 associate degrees conferred in 1983-84, for example, all but 3,000 were awarded in the public Community Colleges. Of the 86,000 bachelors' given in the same year, 44,292 and 21,575 were awarded by CSU and UC respectively.

At the graduate level, however, the independent institutions play a more predominant role. In 1983-84, 47 percent of approximately 28,000 masters' degrees were awarded in the private sector. Another 32 percent were given by CSU with 21 percent offered at UC. At the doctoral level, the independent accredited universities and UC each awarded approximately 40 percent of the degrees. Another 20 percent were given by unaccredited private institutions. More than 4,900 (72%) of the 6,800 first professional degrees (medicine, law, veterinary, pharmacy, optometry, religion, dentistry, chiropractic, and osteopathic) were also given by independent colleges and universities (CPEC printouts, 1983-84).

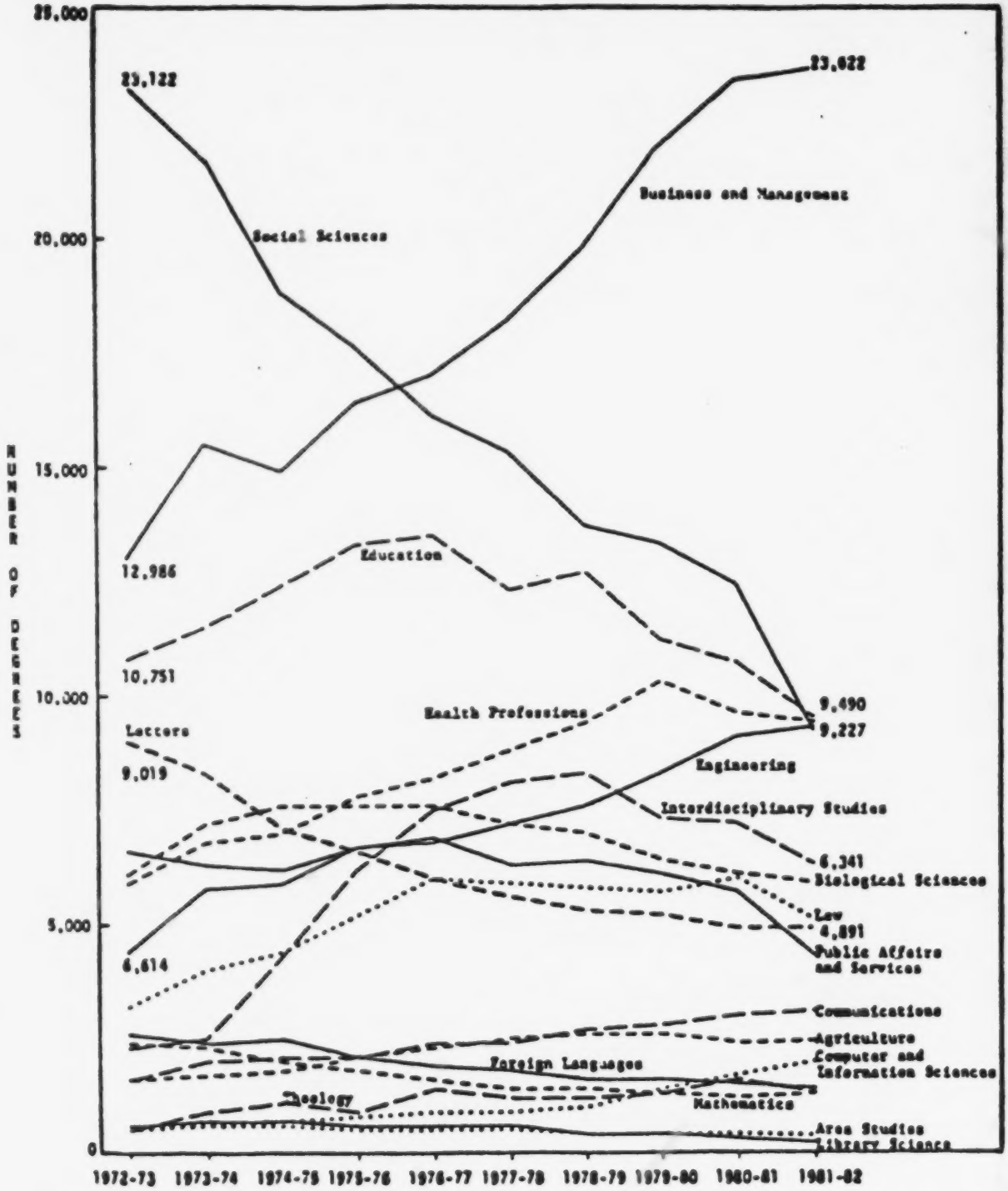
Student pursuit of specific degree fields fluctuates according to economic conditions, perceptions of the job market, and other socioeconomic factors. Although the information is somewhat dated and there are suggestions that changes in the trends are beginning to occur, the graph on the following page clearly illustrates the redirection of student interests that occurred during the 1970's and early 1980's in terms of bachelor's or higher degree fields. Student interest in the social sciences fell dramatically as degrees decreased from over 23,000 to just over 9,000. Letters (i.e., English, philosophy, speech) declined, as well as foreign languages, mathematics, area studies, and library science. Business and management almost doubled, while engineering, communication, and the computer sciences grew steadily. A few fields (i.e. biological science and education) grew initially, but then declined overall by the end of the decade. Other fields (architecture, art, home economics, the physical sciences, and psychology) changed very little and thus are not included in the presentation.*

Noncredit Adult Education

As has been discussed in a previous paper (Background Papers, Challenge of Change, p.76), the term "adult education" has proven particularly difficult to define. In analyzing this problem, the 1960 Master Plan for Higher Education pointed out that even the terminology has led to confusion: "The various segments of higher education have used terms such as extension, extended-day, part-time, adult, evening classes, and continuing education" (p.144). Some discussions of the field include various courses for credit, others do not. Some include vocational education as a subcategory of adult education (see, for example, CPEC Background Papers, pp. 279-85), while others tend to view vocational education as a separate entity.

*Later CPEC data suggests that -- in the University of California, at least -- the downward trends for the Social Sciences, Letters, and mathematics have been reversed in the last few years (Director's Report, May 1986).

Number of Bachelor's and Higher Degrees Awarded to Students Majoring in Eighteen Fields of Study, 1972-73 through 1981-82



Source: CPEC Director's Report, March 1984.

For the limited purpose of this paper, we will not attempt to define the broader field of adult education. Rather, using the 1960 Master Plan's differentiation between "those enrollees who are pursuing a stated, planned program with definite occupational or liberal educational objectives and those who are enrolled in single courses for which matriculation or prerequisites are absent" (pp.144-5), we will focus on noncredit offerings aimed at individuals beyond the age when most students attend college and at those who are enrolled part-time. Vocational education will be discussed in a following section.

Both the Community Colleges and the public school adult schools are permitted to offer state-funded noncredit adult classes in ten specific areas: elementary and secondary basic skills; English as a Second Language (ESL); citizenship; programs for the handicapped; parenting; programs for older adults; home economics; health and safety education; vocational training programs; and vocational apprenticeships. Community Colleges and adult schools in the same geographical regions are able to offer duplicated courses in the above designated areas.

California's adult schools are generally established as distinct administrative units within the unified and high school districts. Their purpose is to provide literacy skills, employability, parenting abilities, and to meet specific needs of special groups such as older persons, the handicapped, and limited-English speaking adults. More than 1.5 million enroll in the adult school classes, including over 620,000 in adult basic education alone (CPEC Background Papers, p.279). In addition, there is a federally funded ($8 million) adult basic education program administered by the State Department of Education which services more than 600,000 adults in 150 local programs.

At the Community College level, a 1984 report showed an unduplicated student enrollment in noncredit adult classes of 155,000, representing about 13 percent of total Community College enrollments. ESL, basic skills, and short-term vocational courses accounted for 54 percent of all noncredit offerings and more than 59 percent of student enrollment. English as a Second Language had the largest course enrollments, while basic skills offerings ranked fourth (Background Papers, Challenge of Change, p.77).

In addition to state-supported noncredit adult education offerings, the Community Colleges also offer a wide variety of community service classes. These include avocational, recreational, and professional inservice courses provided in the form of seminars, lectures, forums, conferences, and workshops, as well as more broad community service acivities such as community development work and cultural and Civic Center activities. A 1985 survey of slightly over 20 percent of the Community Colleges, showed that the average college offered over 420 community service classes with total enrollments of approximately 9,600 per institution. While listings do indicate that a large number of the offerings are in the areas of business/management and computer/communication, there are also substantial numbers of personal growth and recreational classes ranging from "learning to ski without snow" to "personal cosmetic makeover" (Background Papers, Challenge of Change, pp.80-1).

The University of California and the California State University systems are also quite involved in the adult school "market." Through their fee-based "extension programs," they annually enroll more than 40,000 students, primarily in continuing and avocational education (CPEC Background Papers, p.277). While one might expect heavy intellectual fare from the universities, such is not necessarily the case. Significant academic concerns are prevelant, but -- as we pointed out in an earlier paper -- the Summer 1985 Extension Catalogue from UC Berkeley also shows such courses as Fly Fishing for Trout and Swimming Pool Maintenance.

Finally, of course, there are continuing education programs run by some of the private colleges and universities, as well as numerous college "affiliated" programs such as various "universities afloat." If there is a market in California, it seems that some enterprising educational entrepreneur has already filled it.

Different Kinds of Adult Education, Characteristics of Students and Involved Segments

Kind of Adult Education	Characteristics of Students	Segment Involved and Source of Support
Continuing Education	Usually professionals or those already employed.	University and State University Extension; Community College Community Service. Supported primarily by tuition.
Avocational	Middle income relatively well-educated.	Tuition payments by students in the University, State University, Community Colleges, and Adult Schools.
Basic Intellectual Skills/ Citizenship	Disadvantaged students in terms of educational or socio-economic status; refugees and those without U.S. citizenship.	Community Colleges and Adult Schools. State-supported.
Short-Term Vocational Education	Entry-level workers or displaced workers; job changers.	Community Colleges and Adult Schools. State-supported, although the courses have required considerable fees for equipment and materials.

Source: CPEC, Background Papers to a Prospectus for California Postsecondary Education, March 1985.

Vocational Education and Employment Training

Vocational education can be defined as education designed to instill self-sufficiency in students through a teaching of generalized skills; employment preparation involves the teaching of specific skills necessary for particular jobs (MPC Background Paper #8). Vocational education is a broad concept which includes employment preparation aspects. Vocational education is long-range in nature; apart from helping individuals to attain entry level employment, it also impacts occupational advancement, upgrading, or career change. Employment training is more intensive, job specific, and of short duration. For purposes of this general overview, vocational education and employment training will be considered as essentially one entity.

Vocational programs fall into seven major occupational categories -- agriculture, distribution, health, occupational home economics, business and office, technical, and trade and industry -- plus one nonoccupational field, consumer and homemaking education. In California, vocational programs are delivered through a number of different agencies including the Community Colleges, regional occupational centers and programs, adult schools, secondary schools, proprietary schools, the Department of Corrections, the Division of Apprenticeship Standards, and the California State University system. In addition, there are a number of federal and state programs geared specifically to employment training.

By far the largest number of individual students to enroll in vocational courses -- almost 1,000,000 per year -- do so in the Community Colleges. Since 1979, over 78 percent of Community College students have been enrolled in one or more vocational courses (up from 13 percent in 1965). In 1983-84, the Community Colleges generated over 138 million annual hours of vocational instruction in over 59,000 courses, most of which were offered for credit and under certain circumstances could be transferred to the CSU system. Approximately 35 percent of the total weekly contact hours generated in the Community College system resulted from vocational courses. Over two-thirds of all the vocational enrollments were concentrated in three primary areas: business related programs, 36 percent; technical programs, 18 percent; computer related courses, 14 percent. [Pathways to Progress, pp.1-1, 1-12, 4-1, 4-6.]

Through the adult schools, the public school segment also services large numbers of students -- primarily through courses focusing on specific job training with the goal of rapid employment. In 1980-81, for example, it was estimated that over 250,000 adults took advantage of such offerings (Background Papers, Challenge of Change). The secondary schools in conjunction with the regional occupational centers and programs also offer courses for another 28,000 adults yearly (MPC Background Paper #8). Other public providers of vocational education include the CSU system which offers a small number of noncredit programs, the Department of Corrections which contracts with local Community Colleges to provide vocational courses in the prison system, and the Division of Apprenticeship Standards which contracts with Community Colleges, adult schools, and secondary schools for the provision of "related apprenticeship training" (enrollment estimates vary from 25,000 to 50,000 depending upon the source).

Finally, there are the proprietary vocational schools, which usually focus on developing specific job skills for a particular occupation in a short period of time. Because there are limited reporting requirements for these institutions, accurate figures regarding enrollments and course offerings are almost impossible to obtain. However, a 1984 study analyzing 1,387 proprietary schools does provide some indication of the size and scope of the private vocational enterprise. The institutions enrolled over 467,000 students in 1982, who in turn accounted for nearly half of all postsecondary vocational enrollments (mostly full-time students). Four out of five proprietary schools fell into the categories of technical (35%), business (23%), and cosmetology (21%), while health professional schools accounted for 14 percent and computer schools another 6 percent. Most of the students were enrolled in the business schools (29%), cosmetology schools (26%), and technical schools (26%). Most of the proprietary schools (62%) were not accredited, including 83 percent of the technical schools, 63 percent of the health schools, and 61 percent of the business schools (Wilms 1984, as cited in Background Papers, Challenge of Change, p.51, and MPC Background Paper #8).

Research

The scope of the research enterprise in California is prodigious. The major research universities -- the UC system, Stanford, Caltech and a few other private institutions, such as the Claremont Graduate School and the University of Southern California, which have developed important efforts in certain areas -- bring in and expend enough research dollars to cover the entire budgets of many small nations. Literally billions of dollars are spent on research in California each year.

Data from the University of California gives some idea of the magnitude of the research effort. In 1981-82, for example, the University expended over $550 million for research, approximately 80 percent of which was from other sources than State General Funds (i.e., federal, private gifts and contracts, and endowments). In addition, the University received $1.17 billion from the federal government as manager of the Department of Energy Laboratories at Berkeley, Los Angeles, Livermore, and Los Alamos, New Mexico (Economic Impact, pp.6, 12).

The University ranks first among all universities in the country (including other multicampus systems) in level of federal funding. If individual campuses are considered, UCLA, San Diego, Berkeley, and UCSF all rank in the top twenty-one in the nation (Economic Impact, p.13). Stanford and Caltech also rank extremely high.

In looking at research efforts that impact on the public, it is easy to focus on the more applied fields such as technology and agriculture. However, we should bear in mind that most university research is in the area of basic research -- involving highly uncertain results but forming the foundation for most major scientific and technological breakthroughs. (The discovery of DNA and RNA, for example, came from basic research into the mysteries of the cell, only later leading to corporate specialization in the creation of new and beneficial plants and pharmaceuticals.)

The University of California has made notable technological advances in computers, chemicals, pharmaceuticals, and the biomedical sciences among other categories. For 25 years, UC has been involved in the field of microelectronics and has made significant contributions in the fields of computer architecture and computer design. In the field of recombinant DNA, or gene splicing, the University already holds numerous patents jointly with Stanford. Inventions already refined or soon to be in production include the synthetic production of insulin and interferon, food stuffs, hybrid plant strains with unique resistence and immunities, and organisms that can digest oil from major spills (Wealth of Knowledge, p.16).

In the health field, UC campuses are national leaders in the clinical studies of various cancers. In the field of energy, UCLA and the Lawrence Livermore Laboratory are attempting to develop fusion power. Scientists from several campuses work with the California Energy Studies Program on energy conservation in California buildings, energy policies, energy supply resources, and energy technologies. Research on earthquake safety is leading to several new innovations in building designs. Through the University's agricultural research, diseases of both plants and animals have been controlled, productivity has been enhanced, and harvests greatly increased.

Research activities at California's private universities also have contributed significantly to California's development. For example, aeronautical, astronautical, and astrophysical studies at Caltech have accounted in large part for California's prominence in the aerospace industries. The Jet Propulsion Laboratory in Pasadena operated by Caltech for NASA, is the center for our exploration of the solar system. Caltech has made major technological breakthroughs in importing water and power to southern California, and in the design of earthquake resistant buildings. Caltech also operates the famous Palomar Observatory. Alumni have founded such companies as Aero-Jet General, Beckman Instruments, Intel, and TRW.

Electronics research pioneered at Stanford during the 1930's directly led to the development of "Silicon Valley." Stanford is also known throughout the world for its research in heart disease, genetic engineering, and cancer.

Though not generally recognized, research activities within the California State University system are also substantial. During 1981-82, for example, CSU brought in $39 million in federal funding for "projects," much of which was to be used directly for research activities. As a result, the CSU system ranked 14th nationally in total federal obligations (The Impact of the California State University, p.III-6).

Public Service

The public service benefits to California resulting from its postsecondary education system are mostly intangible. University and college budgets have some line items specifically designated for public service, but these cover only a few special programs and do not convey the overall efforts of individual faculty and staff who make contributions to their communities through

participation on local, state, and national boards, committees, and advisory panels. Faculty at many institutions are required to perform public service as a part of their job expectations, but no measure has as yet been attempted to account for these efforts. Thus, we can only point out a few of the more obvious services offered by the postsecondary institutions.

The University of California is one of the largest single institutional providers of health services in the state. The University operates five major teaching hospitals, two neuropsychiatric institutes, one veterinary medical teaching hospital, and a number of medical, dental, and optometric clinics. The private institutions also operate a number of hospitals and clinics as at USC and Loma Linda. Stanford's medical center admits up to 25,000 patients a year from nearby communities and around the world, while also treating the same number in emergency facilities and serving 130,000 more via out-patient care (Wealth of Knowledge, p.23). While these medical activities are a part of educational and research responsibilities, they also result in significant public service by providing general health care and making specialized medical expertise available to the larger society.

College and university libraries are major resources which in most cases are open to the public. Tens of thousands of lay persons use various college library facilities each year. UC libraries alone, for example, contain over 19,000,000 volumes as well as serials, manuscripts, maps, microfilms, government documents, and recordings.

The University also markets public service via its state supported Cooperative Extension program. Through the program, the University disseminates the results of its agricultural research. Utilizing both in-house specialists and more generally trained advisers operating out of 67 local offices throughout the state, Cooperative Extension helps identify coummunity and agricultural problems and applies research results to their solution. In addition to information dissemination, the program offers 4-H projects for rural youth and food and nutrition counseling for low-income families (Economic Impact, pp.10, 15).

Other regularly budgeted public service programs include CSU San Diego's public television station and the projects jointly operated by CSU, UC, and certain independent universities designed to support developments in the public school system. Through such programs as MESA, EQUALS, the California Writing Project, the California Mathematics Project, and Partnership, the universities work with public school teachers and students in an attempt to improve student preparation for higher education and to encourage low-income and minority youth to prepare themselves for college.

Although discussed above under adult education, the Community Colleges' community service programs also fall in the area of public service. The programs directly reflect local demand covering a wide range of topics. Similarly, the Extended Education Program at CSU strives to be responsive to public educational needs not immediately met by ongoing campus academic programs.

At CSU, and many other colleges, volunteer efforts are considerable. Most CSU campuses have programs which match volunteer student tutors with school children. Through the Volunteer Income Tax Assistance program, business students at several CSU campuses prepare tax returns for low-income, elderly, handicapped, and non-English speaking persons. Counseling interns often serve the community free of charge. Faculty too are involved in volunteer activities. Long Beach State has attempted to chronicle the activities of faculty and staff and has found them serving on Chambers of Commerce, school boards, museum boards, civic organizations, citizens' advisory committees, and library boards. The faculty were found to be serving as advisers on issues such as water quality, transportation, urban affairs, pelicans, health care, mental health, air quality, farming, and schools (The Impact of the California State Univerisity, pp.11-13).

The private institutions also make contributions through public service. At Stanford, for example, the Lively Arts program presents free miniconcerts in schools, hospitals, and senior centers. Faculty and staff at the Stanford Medical Center participate in outreach programs for community professionals by offering classes, lectures, and workshops. One such program, the Mid-Coastal California Perinatal Outreach Program, tries to improve the outcome of high risk pregnancies through a series of seminars given at Stanford and other community hospitals.

Some Stanford students serve as big brothers or sisters for adolescents in the local communities, while other students serve as volunteer tutors through the Barrio Assistance Program. Stanford faculty serve nationally with many panels, advisory boards, and institutes, perhaps most notably at the Hoover Institution on the Stanford campus.

Finally, most of the state's college and university campuses offer institutionally-sponsored cultural programs available on campus to the local population. These include film, dance, theater, lectures, forums, public policy debates, and museum and art shows. Substantial numbers of people take advantage of these events. For example, in 1981-82 over 800,000 citizens attended such events at just seven of the UC campuses (Economic Impact, p.15).

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BACKGROUND PAPER NO. 5:

THE GOVERNANCE OF POSTSECONDARY EDUCATION IN CALIFORNIA: AN OVERVIEW OF THE EXISTING STRUCTURE AND ITS EVOLUTION; GOVERNANCE OF THE PUBLIC INSTITUTIONS; PRIVATE INSTITUTIONAL COORDINATION; STUDENT AID ADMINISTRATION; STATEWIDE COORDINATION; THE ROLE OF THE LEGISLATURE AND THE GOVERNOR; A BRIEF COMPARISON WITH OTHER STATES.

An Overview of the Existing Governance Structures and Their Evolution

Postsecondary education in California is provided by the three public segments -- the University of California, the California State University, and the California Community Colleges -- and an array of private colleges, universities, professional schools, and technical and vocational schools. Each of the public segments has a governing body that is responsible in some degree for statewide policy direction and management, with the University of California's Board of Regents having the greatest authority and the Board of Governors of the California Community Colleges the least. In addition, there are two relatively small state institutions, the California Maritime Academy and Hastings College of Law, which have their own boards of directors.

The private institutions have their own voluntary associations but operate under their individual governing boards or, in the case of the proprietary schools, business organizations. Although commonly considered as a single "segment" of postsecondary education, the private institutions might more usefully be divided among at least three or more segments. The Private Postsecondary Education Division of the State Department of Education and the Council for Private Postsecondary Education share responsibility for the minimal supervision of private institutions that the state has undertaken.

Both the public and private institutions are within the scope of the California Postsecondary Education Commission's responsibility, although that agency is principally concerned with the public institutions as a consequence of the manner in which its statutory functions and responsibilities have been written. State financial aid for students attending both public and private institutions is administered by the Student Aid Commission, an independent agency with no direct link to CPEC or the institutional governing boards.

Governance of the Public Institutions

University of California

The University of California is governed by the Board of Regents, who act as a board of directors of a public corporation. The Board currently consists of 30 members: twenty-two appointed by the Governor of California for 12-year terms; one student member appointed by the Regents to a one-year term; and seven *ex officio* members, including the Governor, Lieutenant Governor, Speaker of the Assembly, Superintendent of Public Instruction, the President and Vice President of the Alumni Association of the University, and the President of the University.

Article IX, Section 9 of the State Constitution prescribes the form and composition of the Board of Regents and its duties and powers. The Constitution, as ratified in 1879, granted to the corporation full powers of organization and government, subject only to such legislative control as may be necessary to ensure compliance with the terms of the endowments of the University and the security of its funds. A 1918 amendment retained this provision and vested the Regents legal title to all properties of the University, real and personal, and their management and disposition for the benefit of the University. Further, it gave the corporation all powers necessary or convenient for the effective administration of its trust, the power to sue and be sued and to delegate such authority or functions as it deems wise.

In 1918, the President of the University and the President of the Alumni Association became ex officio Regents. Subsequent amendments to the Constitution affecting the Regents have concerned such matters as open meetings. The Board may meet in closed session to consider matters affecting national security, the conferring of honors, gifts, investments, litigation, acquisition and disposition of property, personnel matters, collective bargaining matters, and so on. A Constitutional amendment in 1974 reduced the number of ex officio Regents from 8 to 7, but increased the number of appointive members from 16 to 18 and provided that such appointments are subject to confirmation by the Senate. It also reduced the members' terms from 16 to 12 years. During the transition period, the number of Regents increased to 30 in 1985 but will decrease to 26 by 1990 (18 appointive members, 7 ex officio, and one student). It also provided that the Governor shall consult an advisory committee in selecting his appointees to the Regents, and prescribed its membership. The intent is to provide Regents who are "able persons, broadly reflective of the economic, cultural, and social diversity of the State..."

The same amendment gave the Board the right, at its discretion, to appoint to the Board a member of the UC faculty or of another institution of higher education and a student of the University. The faculty voted not to exercise the right of an appointment to the Board, based on their stated belief that a faculty member's sitting as a voting member of the board would constitute conflict of interest. Instead, the Chairman and Vice Chairman of the Academic Council sit with the Board, with full participation in discussion and debate but without vote. A student regent is appointed by the Regents for a term of one year. The student has all the powers and duties of a regent selected in any other fashion.

The Governor is officially the President of the Board of Regents, but in practice the presiding officer is the chairman, elected from among its body for a one-year term. The vice chairman is also elected from among the membership for a one-year term. Every matter requiring Board action is, with few exceptions, first considered by a Board committee, but the committees have the authority only to recommend or report to the Board. The Board operates through seven standing committees: Audit, Educational Policy, Finance, Grounds and Buildings, Hospital Governance, Investments, and Oversight of the Department of Energy Laboratories. There are also a varying number of subcommittees and special committees. The Board meets nine times a year. Standing and special committees meet as required, usually on the day preceding the Board meeting.

The Board, in its standing orders, has delegated a broad range of authority and responsibility to the President of the University and has delegated authority in academic matters to the faculty.* The campus chancellors are responsible for the operation of the individual campuses except as provided in the Regents' standing orders and except for activities that the Regents have designated as "Universitywide." The standing orders provide that, subject to the approval of the Regents, the academic senates determine the requirements for admission and for certificates and degrees, authorize and supervise all courses and curricula (except those of certain professional schools), advise the chancellors on the campus budgets, determine the membership of the faculties and senates, and may bring before the Regents, through the University president, any matter regarding the conduct and welfare of the University.

The membership of the Academic Senate includes all professors, certain lecturers, campus librarians, registrars, admissions officers, directors of academic programs, provosts, deans, vice chancellors, chancellors, and the academic vice president and president. The senate of each campus (or "division") operates as a legislative body that meets from three to six times a year and as a system of committees. The Assembly of the Academic Senate and its committees are the universitywide senate body. The Assembly, which meets three times each year, is made up of the chairs of the nine campus senates, chairs of the major universitywide committees, and 35 faculty members appointed or elected in proportion to the number of members on each campus.

California State University

The California State University began as a number of state normal schools with local governing boards. In 1920, the local boards were abolished and the colleges placed under the jurisdiction of the State Department of Education and the Superintendent of Public Instruction. In 1935, they were renamed state colleges, but it was not until 1961 that they were reorganized under their own governing board and not until 1972 that they became the California State University and Colleges. Their title was shortened to California State University in 1981.

The California State University is governed by a Board of Trustees that has 24 members: 16 appointed by the Governor and confirmed by the Senate; 5 ex officio members, including the Governor, Lieutenant Governor, Assembly Speaker, Superintendent of Public Instruction, and the Chancellor of the University; and one student member, one faculty member, and one alumni representative. Other than the ex officio members, all serve eight-year terms except the student, faculty, and alumni members, who serve two-year terms. The Board of Trustees has broad statutory authority with respect to the management and administration of the State University, and as a state board it is governed by statutes that apply generally to all state agencies, departments, and boards unless expressly exempted. Like the Board of Regents, the Trustees work through a number of standing committees which reflect the prinicipal powers of the Board.

*The Regents may withdraw this delegation of power whenever they choose to do so, as they did in 1970 to terminate the employment of Angela Davis.

The Board of Trustees has delegated much of its authority to the Chancellor of the University, who in turn has delegated much authority to campus presidents. The Chancellor is responsible for developing the annual support and capital outlay budgets for the system, administering the personnel system, and overseeing the management of the campuses and statewide programs. Campus presidents have substantial fiscal authority (subject to post audit) and have been delegated authority to hire and promote faculty and staff. The CSU Statewide Academic Senate advises the Board on curricular development, admission and graduation requirements, criteria and standards for faculty hiring and advancement, and budget support for the campuses. If the Statewide Senate does not in practice exercise as much authority as the UC Academic Senate, that probably reflects the different histories of the two segments. UC grew from a single institution in which the faculty traditionally played a major role in academic governance. CSU was formed from a number of semiautonomous institutions in which there were many, relatively weak faculty organizations. Campus faculty senates and councils were formed shortly before and after creation of the Board of Trustees in 1961, but the systemwide Academic Senate was not established until 1963, and systemwide senate members are elected by each campus senate. With strong senates on some campuses and weak senates on others, the CSU Academic Senate has been unable in the years since then to develop the degree of unity and acceptance enjoyed by the UC Academic Senate.

The advent of collective bargaining has done little to strengthen the CSU Academic Senate. The Higher Education Employer-Employee Relations Act (HEERA), which covers both UC and CSU, states that the "joint decision making and consultation between administration and faculty or academic employees is the long-accepted manner of governing institutions of higher learning" and goes on to say that nothing in the collective bargaining law "shall be construed to restrict, limit, or prohibit the full exercise of the functions of the faculty...The principle of peer review of appointment, promotion, retention, and tenure for academic employees shall be preserved." Thus, the act appears to provide strong, continuing protection for the CSU Academic Senate, just as it does for the UC Academic Senate, as well as for the concept of collegial governance.* Nevertheless, the California Faculty Association, which is the statewide faculty bargaining unit, has succeeded in bringing issues to the bargaining table that the Senate believes should be decided through consultation between the Senate and the Board of Trustees (Goldstein, p.1). Thus CFA has become another important participant in the CSU governance system.

California Community Colleges

The Community College system has often been characterized as one of "shared governance" with responsibility divided between the districts at the local level and the Board of Governors at the state level. At the local level, the California Community Colleges are organized into 70 Community College districts, each with a locally elected governing board. At present, there are 52 single-college districts and 18 districts that operate from two to nine colleges each. District boards consist of five or seven members,

*Unlike the CSU faculty, the UC faculty has not chosen to form a collective bargaining unit.

elected to four-year (staggered) terms, and one nonvoting student member. The district boards review and approve all district instructional programs and services, hire and fire all district employees and establish policies regarding the admission of students who are not high school graduates. They also establish standards for student suspension and dismissal, approve district and campus budgets, conduct collective bargaining with organized faculty and staff, determine salaries and benefits for all employees, and establish academic standards consistent with minimum standards established by the Board of Governors.

At the state level, the Board of Governors consists of fifteen members, of which thirteen are appointed by the Governor to represent the general public. These members, subject to confirmation by the Senate, serve four-year terms. One additinal member is appointed to represent the Community College faculty and serves a two-year term. The fifteenth member is a student and serves for one year.

The Board of Governors approves all state-funded programs and courses; establishes minimum academic standards regarding graduation, probation, dismissal, and readmission; approves district capital outlay budgets and space utilization standards for state aid; administers certain categorical programs (EOPS, HSPS, etc.); establishes minimum employment standards for faculty and staff; approves district academic and facility master plans; establishes uniform standards for budgeting and accounting; approves the formation of new districts and the reorganization of existing districts; and establishes standards for teaching and administrative credentials. The power and duties of the Board of Governors, like those of the district boards, are spelled out in great detail in statute.

The districts are administered by chancellors or superintendents who are appointed by and serve at the pleasure of their district boards. The statewide office is administered by the Chancellor who is appointed by and serves at the pleasure of the Board of Governors. There is no formal linkage between the state Chancellor and the chief administrative officers of the districts, just as there is no formal linkage between the Board of Governors and the district governing boards. Thus the Board of Governors must operate more as a coordinating agency then as a governing body for the Community Colleges.

The Education Code authorizes each district governing board to establish a faculty senate or council, and their powers and duties are largely a matter of district discretion (UCCC, p.34). These local senates and councils formed a statewide Academic Senate in 1969. Membership is limited to full-time faculty, although part-time instructors may be authorized to participate by vote of the full-time faculty. Collective bargaining also takes place at the district level and is governed by the provisions of the Educational Employment Relations Act, which also governs collective bargaining for public school employees. The faculty collective bargaining unit is stronger than the senate in many districts, in part because the Community College senates, operating under a different collective bargaining law, have not been able to gain the same protection enjoyed by the UC and CSU senates.

Other State Institutions

Hastings College of Law has been affiliated with the University of California since 1878 and is designated by statute as a law department of the University, but it is governed by its own Board of Directors and is operated independently of UC in nearly all respects. The other independent public institution, the California Maritime Academy, also has its own Board of Governors, which consists of seven gubernatorial appointees: three lay members, two educators, and two representatives of the maritime industry. By statute, it is "within the Department of Education," but its board is authorized to manage the academy without consulting the department except in certain matters regarding tuition charges.*

Private Institutional Coordination

As described in a separate background paper, private postsecondary education in California includes 181 accredited degree-granting institutions, 194 approved or authorized degree-granting institutions, two schools of theology, 17 state-licensed hospitals, and 2,240 other accredited and nonaccredited schools and courses. Sixty-two of the independent accredited degree-granting colleges and universities are members of the Association of Independent California Colleges and Universities (AICCU), a voluntary association that serves as an advocate for the institutions in Sacramento and keeps its members informed about public policies and programs of interest to them. AICCU has a board of Directors composed of two representatives for each institution and an 18-member Executive Committee. There is also an AICCU Research Foundation that conducts educational, informational, and research activities in support of the association.

Many of the approved (but nonaccredited) degree-granting institutions are members of the California Association of State Approved Colleges and Universities, and a large number of proprietary schools are members of the California Association of Private Postsecondary Schools, both of which provide representation in Sacramento. Other organizations and associations are the Association of Reporter Training Schools, the California Barber College Association, the California Association of Schools of Cosmetology, the Independent Law Schools Association, and the Correspondence Accredited School Association.

Student Financial Aid Administration

The state's student aid program, which provides support for students attending both public and private institutions, is administered by a semiautonomous Student Aid Commission. Although not a governing body comparable to the segmental boards, this commission is responsible for the

*The Trustees of the California State University are authorized by statute to provide certain services to the CMA Board of Governors and to serve as a Board of Visitors to discuss policies and concepts common to CSU and CMA, but this authority does not affect "the exclusive authority of the board of governors to administer the academy" (EC 89003-4).

management of six state grant programs, a federal loan guarantee program, an outreach program, a loan assumption program, and the dissemination of information about these programs, and it has a combined annual budget of nearly $300 million. The commission is composed of 11 members appointed by the Governor. These 11 members include three representatives of the public segments, one representative of the independent colleges and universities, one representative of "public, proprietary, or nonprofit schools in California," two students, and three public members. The Commission appoints a director who serves at its pleasure.

Statewide Coordination

Responsibility for coordinating public and private postsecondary education in California and for providing independent policy analysis and recommendations to the Governor and the Legislature has been assigned to the California Postsecondary Education Commission. The Commission has 15 members, nine representing the general public and six representing the principal boards and organizations concerned with postsecondary education: the Regents of the University of California, the Trustees of the California State University, the Board of Governors of the California Community Colleges, the Association of Independent Colleges and Universities, the Council for Private Postsecondary Educational Institutions, and the State Board of Education. Three of the public members are appointed by the Governor, three by the Senate Rules Committee, and three by the Speaker of the Assembly. The public members serve six-year terms, the AICCU representative a three-year term, and the others serve at the pleasure of the boards they represent.

The Commission is an advisory body charged by statute "to assure the effective utilization of public postsecondary education resources, thereby eliminating waste and unnecessary duplication, and to promote diversity, innovation, and responsiveness to student and societal needs." Its recommendations are "a primary consideration in developing state policy and funding for postsecondary education" (EC 66900). Among its specific responsibilities are: preparation and annual updating of a five-year state plan for postsecondary education; advising the Legislature and Governor as to the need for and location of new campuses; periodic review of educational programs of the public institutions; development of criteria for evaluating the effectiveness of postsecondary education; development of a comprehensive data base for postsecondary education in California; biennial reporting on the employment of ethnic minorities and women by UC, CSU, and the Community Colleges; and reporting annually on the financial condition of independent institutions.

Its authority lies primarily in its role as advisor to the Legislature and the Governor and the extent of that authority is a function of the degree to which its advice is valued. It also serves as a buffer between the public institutions and the Legislature and Governor, however, so that its authority is also dependent in part on the extent to which it is perceived to be maintaining the orderly evolution of the public institutions (i.e., resolving intersegmental conflicts within the postsecondary education community).

When compared with the state postsecondary education boards in other states, CPEC is among those with relatively limited powers, as indicated in Table 1. At the other extreme, there are more than a dozen states with a single governing board for all public postsecondary institutions, and there are ten others with a single board for all public four-year institutions. Five states have a single governing board for all public education. Among the six largest states, one has a single governing board for all four-year agencies, a separate agency for Community Colleges, and a coordinating board; four have coordinating boards with program approval authority; and one, California, has a coordinating board with review and recommendation authority only.

Table 1: Authority of State Boards of Higher Education

Type of Board	No. of States*
1. Consolidated Governing Board:	
a. Board for All Public Institutions	13
b. Board for All Senior Institutions with Separate Agency for Community Colleges	10
2. Coordinating Board with Program Approval Authority:	
a. Consolidated or Aggregated Budget	8
b. Budget Review and Recommendation	10
c. No Statutory Budget Role	1
3. Coordinating Board with Program Review and Recommendation Authority Only:	
a. Consolidated or Aggregated Budget	2
b. Budget Review and Recommendation**	6
c. No Statutory Budget Role or Program Approval	1
4. Planning Agency Only	3

Notes: *Four states have two kinds of state boards
**CPEC is in this classification

Source: Aims C. McGuinnes, Jr. "The Search for More Effective State Policy Leadership in Higher Education," Education Commission of the States, May 1986.

There are also, within the State Department of Education, a Division of Private Postsecondary Education and a Council for Private Postsecondary Educational Institutions. The council has 15 members: the Superintendent of Public Instruction, four members appointed by the Superintendent, five members appointed by the Senate Rules Committee, five members appointed by the Speaker of the Assembly, and three nonvoting ex officio members: the Director of Consumer Affairs, the Director of the Employment Development, and the Director of CPEC. The council is directed to "provide leadership and direction in the continuing development of private postsecondary education..." (EC94304), but has not done so. The Division of Private Postsecondary Education serves as staff for the council and is directed to publish an annual listing of all private postsecondary institutions authorized to operate in California. Minimum standards required of institutions for such authorization are listed in the Education Code.

The Role of the Legislature and the Governor

The Governor and Legislature exercise a great deal of power with respect to all three public segments of postsecondary education, primarily through the annual appropriation of state support for current operations and capital construction. In regard to support for current operations, their power is largely limited to determining the level of support for each segment, for UC and the Community Colleges (districts), and to a lesser extent CSU, may spend the state support as they please within the bounds of their accepted missions. Yet by threatening to reduce the annual appropriation for one of the segments or by withholding approval of proposed augmentations, either the Governor or the Legislature can influence decisions of many kinds within each segment. In addition, through the continuing process of fiscal review and analysis performed by the Department of Finance and the Legislative Analyst, they can shape those decisions in many more subtle ways.

The Governor and Legislature also derive a degree of authority through their appointments to and membership on the segmental governing boards and through legislation regarding the missions of the three segments. In practice, however, appointees commonly associate themselves more with what they perceive to be the long-term interests of the institutions they govern than with the short-term interests of those who appointed them. And except in times of crisis, the Governor and legislative leaders are seldom sufficiently well-informed and involved in the deliberations of the boards to exercise significant power through their membership on the boards.

Moreover, the institutions are in a position to control and shape to their own interests much of the information regarding their operations that the Governor and the Legislature require to implement state policies. Although the California Postsecondary Education Commission, as well as the Department of Finance and Legislative Analyst often serve as important independent sources of information, these agencies, too, must often be satisfied with only as much information as the institutions provide.

Conclusion: A Brief Comparison with Other States

California was one of the first states to attempt to control the evolution of its higher education institutions during the period of rapid growth in the 1950's and 1960's, largely because the size and cost of the public institutions made such control essential. It was also one of the first large states to attempt to develop a statewide coordinating mechanism linking all levels of higher education in both the public and private sectors.

However, as other large states have moved to strengthen their coordinating agencies and in some cases convert them to central governing boards, California has maintained its relatively decentralized governance structure for postsecondary education. In part, this may be because the public institutions, as a result of their size and scope and achievements have become extremely powerful and resistent to change. In part, it may be because California, unlike most states, has both a strong Governor and a strong Legislature, and neither has wanted to create another center of power that could more effectively challenge its authority.

A number of other states are now reconsidering the structure and authority of their postsecondary educational systems. Some appear to be moving toward greater centralization, others toward decentralization, depending largely upon conditions and experience particular to each state rather than upon some shared concept of an appropriate governance structure for postsecondary education. Unquestionably, there is much to be learned from the experience of other states, but in the end California must determine what governance structure best serves its own institutions and interests.

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BACKGROUND PAPER NO. 6:

WHAT IS THE PRIVATE SECTOR: ACCREDITED DEGREE-GRANTING COLLEGES AND UNIVERSITIES; NONACCREDITIED DEGREE-GRANTING COLLEGES AND UNIVERSITIES; NONDEGREE-GRANTING SCHOOLS; HOW THESE INSTITUTIONS ARE CLASSIFIED IN THE EDUCATION CODE, THEIR ENROLLMENTS, PROGRAMS, DEGREE OUTPUT, AND FINANCE.

Introduction

The most distinctive feature of California's independent universities and colleges and private schools is the diversity of their academic and vocational programs. They include institutions that are degree-granting and nondegree-granting, accredited and nonaccredited, religious and secular, and nonprofit and profit. They vary from institutions that offer a single academic or vocational specialty to comprehesive universities which offer a full array of baccalaureate, masters, doctoral, and professional degree programs.

Accredited Degree-Granting Colleges and Universities

Currently, California has 181 regionally or nationally accredited degree-granting colleges and universities offering a wide variety of certificate, associate, bachelors, masters, doctorate, and first professional degree programs. These institutions are classified under Section 94310(a) of the Education Code, which states:

> The institution, which at the time of the issuance of a degree, has accreditation of the institution, program, or specific course of study upon which the degree is based by a national accrediting agency recognized by the United States Department of Education, the Western Association of Schools and Colleges, or by the Committee of Bar Examiners for the State of California...

Accreditation, however, differs among these institutions listed under this section of the Education Code. Among the 181 accredited institutions, 138 hold regional institutionwide accreditation by the Western Association of Schools and Colleges (WASC). Of these 138, 75 institutions hold WASC accreditation only, 16 are accredited by WASC and the Committee of Bar Examiners of the State of California, and the remaining 47 hold both a WASC accreditation and at least one national accreditation.

Of the remaining 43 accredited institutions (those without WASC accreditation), 12 institutions are accredited only by the Committee of Bar Examiners for the State of California, and 31 hold only national accreditations, e.g. the National Association of Trade and Technical Schools, the Association of Independent Colleges and Schools, the Association of Theological Schools, the American Association of Bible Schools, the National Association of Schools of Arts and Design, and the Council on Chiropractic Education.

Accreditation is a means of regular, periodic "peer review" by educators to assure that the operations and resources of a college or university reflect educational quality. Accredited institutions meet the standards of quality set by the the agencies that have accredited them, rather than only the regulatory standards required by the state for approval or authorization to grant degrees.* By doing so, the course credits they award students enjoy acceptability among similarly accredited institutions.

In addition to certifying that an institution meets established educational standards, accreditation acts as an aid to institutions in improving their operations beyond those standards, both by requiring institutional self-review of program quality, and by the periodic review by educators from other institutions involved in the reaccrediation process.

Accreditation itself, however, does not determine the role and mission of the independent sector or its institutions. This is especially true for those institutions categorized as accredited colleges and universities. Therefore, the definition of independent accredited degree-granting institutions based on accreditation status alone does not present an accurate picture regarding the functional distinctions that exist among these institutions of higher education. For example, accredited independent institutions vary in size and scope from the two-year Deep Springs College in Inyo County, which enrolls 24 students, to the University of Southern California in Los Angeles County, which offers a full array of comprehensive baccalaureate, graduate, and professional degree programs to over 27,000 students.

Therefore, for policy discussion, accredited independent institutions are better defined in terms of their program offerings. For example, institutions such as Stanford University, California Institute of Technology, the University of Southern California, the Claremont Colleges, Loma Linda, and Mills College more closely approximate the educational environment and the kind of program offerings of institutions within the University of California and the California State University systems. In addition, these comprehensive and liberal arts colleges and universities, like their public four-year counterparts, hold both WASC and various national programmatic accreditations. Other accredited independent colleges and universities, especially two-year institutions that offer transfer and specific vocational associate and certificate programs, are similar to the community colleges. Still other accredited institutions offer specialized degrees in law, optometry, theology, music, or psychology. And although the specialized programs offered by these institutions are similar to programs offered by the University or State University, the educational environment of these single purpose colleges and universities differs markedly from that of the multipurpose institution.

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*A detailed discription of "approved" and "authorized" degree-granting institutions appears later in this paper as part of the discussion on "nonaccredited" institutions.

Accordingly, the appendix provides a detailed breakdown of enrollments, degrees conferred, faculty, and general finance data by categories of institutions which serve similar roles and missions. These groupings of the colleges and universities provide a more functional distinction with respect to their program offerings and should be used when discussing potential state policy. These categories of institutions, developed by the National Center for Education Statistics, are:

- Doctoral Level Institutions with Medical Schools
- Doctoral Level Institutions without Medical Schools
- Comprehensive Institutions without Medical Schools
- General Baccalaureate Institutions
- Multiprogram Two-Year Institutions
- Single Program Two-Year Institutions
- Specialized Institutions, with programs in:
  - Business and Management
  - Divinity
  - Education
  - Engineering
  - Fine Arts
  - Law
  - Medical
  - Other Health Professions (e.g. chiropractic, optometry, podiatry)
- Other specialized Institutions

The following paragraphs, however, present summary data on enrollments, program offerings and degrees conferred, faculty, and finance and student aid for all accredited institutions as a single category.

Enrollments:

According to the California Postsecondary Education Commission, 192,873 students were enrolled in accredited degree-granting institutions in fall 1984.* Of this number, 105,648 (54.8%) were male and 87,225 (45.2%) were female; 129,144 (67.0%) were enrolled full-time, and 63,729 (33.0%) were enrolled part-time; 30,129 new first-time freshmen enrolled in accredited independent institutions in that year.

With respect to ethnicity, accredited independent institutions enrolled, as a percent of total resident students: 4.9 percent Blacks, 5.7 percent Hispanics, 7.6 percent Asians and Pacific Islanders, 0.5 percent American Indians, and 71.4 percent whites. Nine percent of all students enrolled in these institutions were enrolled as nonresident aliens.

*The number of students enrolled, as reported by CPEC, exceeds the number reported by John Minter Associates (Appendix A) because the CPEC report included a greater number of institutions which responded to the Fall Enrollment Report of the Higher Education General Information Survey.

Program Offerings and Degrees Conferred:

As mentioned in the introduction, the independent degree-granting institutions, especially those which are accredited, offer a wide array of programs. Academic programs range from agriculture to zoology, and professional programs include medicine, law, optometry, dentistry, pharmacy, podiatry, osteopathic medicine, and theology. In addition, a wide variety of associate and certificate programs are offered by specialty two-year institutions.

According to the California Postsecondary Education Commission, accredited independent colleges and universities awarded 2,283 certificates, 2,771 associate degrees, 19,150 bachelors, 12,500 masters, and 2,155 doctorates in academic year 1983-84. In addition, these institutions awarded 366 degrees in dentistry, 355 in medicine, 93 in optometry, 72 in osteopathic medicine, 2,620 in law, 474 in theology, 593 in chiropractic medicine, and 279 in pharmacy in that year.*

Faculty:

According to John Minter Associates, over 7,500 full-time faculty were employed by accredited independent institutions in the academic year 1984-85, although this number may in fact be low because many insitutions did not respond to the Minter survey. Faculty employed by these institutions vary from those contributing their services (this is especially evident at theological schools), to well-compensated, world renowned Nobel Laureates.**

Finance and Student Aid:

The mechanisms for financing the accredited independent colleges and universities are as diverse as the institutions themselves. Combined, these institutions posted $2.96 billion dollars in total revenues and $2.88 billion in total expenditures, with nearly one-half of these revenues and expenditures having been generated by Stanford and by the University of Southern California alone. Of the total expenditures, $1.91 billion was allocated for "education and general" support purposes. In addition, these institutions reported total endowments in excess of $2.22 billion, of which $1.26 billion was reported by Stanford and the University of Southern California alone.

All of these colleges obtain a substantial percentage of their revenues from state and federal financial aid programs. There are a wide variety of student aid programs that assist students. The state's largest programs are

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*The number of degrees reported by CPEC are for academic year 1983-84, while the number reported by John Minter and Associates (Appendix A) are for 1984-85 and are comprised of a slightly different set of institutions.

**Some discussion regarding faculty at independent colleges and universities appears in MPC Background Paper #7.

Cal Grant A, Cal Grant B, and Graduate Fellowship. In addition, federal funds are available in the form of student grants, known as Pell Grants (or the Basic Educational Opportunity Grant--BEOG), while additional funds are provided to students through institutionally based programs, including the Supplemental Educational Opportunity Grant (SEOG), the National Direct Student Loan Program (NDSL), and the College Work Study Program (CWS). Furthermore, students enrolled at these institutions qualify for federally Guaranteed Student Loans (GSL's). A brief discussion describing these state and federal student aid programs appears in Appendix B.

In 1985-86, 13,967 students enrolled in accredited independent institutions received State Cal Grant A awards totaling $55.8 million, with an average award of $3,995. In addition, 1,439 received Cal Grant B awards totaling $5.16 million, with an average award of $3,586. Finally, 405 students received $2.38 million through the Graduate Fellowship Program, in 1985-86, with the average award being $5,868.

This state aid, however, pales in contrast to the federally funded student aid programs. In 1985-86, $23.3 million in Pell Grants (BEOG), $7.8 million in Supplemental Educational Opportunity Grants, $20.9 million in National Direct Student Loans, $1.5 million in College Work Study, and a staggering $196 million in Guaranteed Student Loans was provided to students at these institutions. In addition, students received $121.5 million in institutionally administered grants (including private grants) and $10.1 million in other loans. In 1985-86, total independent college and university student aid awarded either to students directly or through their institutions amounted to nearly $475 million.

In addition to these formal program allocations, most independent institutions, in order to counterbalance an increasing shortfall in federally allocated student aid funds, are estimated to have provided through a variety of campus-based programs in excess of $160 million dollars.

Nonaccredited Degree-Granting Colleges and Universities

State-Approved Institutions

In addition to its 181 accredited colleges and universities, California has 194 nonaccredited degree-granting institutions. Of these, 69 have received state approval for awarding degrees under Section 94310(b) of the Education Code. To receive approval, an institution must complete a self-study and submit to the Superintendent of Public instruction a report describing its operations. The Superintendent then names a special committee to visit and evaluate the institution. The purpose of the Committee's evaluation is to determine that the institution has the faculty, financial resources, facilities, administrative capabilities, and other educational expertise and resources necessary to afford students -- and require of students -- the completion of a program of education that will prepare them for the attainment of educational objectives, and that the curriculum of the institution is consistent with the curricula established by institutions that offer similar degrees.

state approval by the Superintendent of Public Instruction, however, is not institutionwide or inclusive of all programs offered by the institution. Instead, it is limited to specific degree titles. Some of these degrees, especially those that are given as a prerequisite to state licensure, are in some cases recognized as comparable to degrees conferred by nationally accredited institutions, e.g. advanced degrees in professional clinical psychology. Both the Psychology Examining Committee of the California State Board of Medical Quality Assurance and the California State Board of Behaviorial Science Examiners recognize approved degrees in these fields as comparable to those awarded by accredited institutions. However, this does not suggest that these institutions, who meet state standards for approval, could meet the more rigorous quality standards that would result in either national or regional accreditation.

State-Authorized Institutions

The remaining 125 nonaccredited degree-granting institutions have been "authorized" under Section 94310(c) of the Education Code. These institutions are required to file with the Superintendent of Public Instruction a "full disclosure" statement about their operations that is then verified as truthful and accurate by a visiting committee that includes representatives of the Department of Education and the California Postsecondary Education Commission.

Authorized institutions are prohibited by the state from claiming the state has made any evaluation, recognition, accreditation, approval, or endorsement of their course of study or degrees offered. Authorization indicates that the institution has demonstrated some fiscal responsibility, and is willing to demonstrate through public disclosure that it is free of the imposition of specific degree-program standards and requirements set by the state. In recent months, the Legislature has imposed minimum financial and educational standards on these institutions. Staff from the Department of Education and the California Postsecondary Education Commission have begun visits to these institutions to assure that minimum standards exist. Because of these visits, many of these institutions, believing they will not be able to meet the minimum standards, and having chosen to operate under this section of the Education Code because of their freedom from educational standards and regulation, are now choosing to close their doors. Other authorized institutions continue to operate by meeting the basic state mandate, while several, although few in number, are currently working toward state approval and eventually accreditation.

Enrollments:

Currently, approximately 2,500 students are enrolled in state-approved institutions, and an additional 6,000 students are enrolled in institutions which are state-authorized. Among the approved institutions, men slightly outnumber women by better than three to one. Full-time students at both approved and authorized institutions markedly outnumber part-time students; at approved institutions full-time students constituted nearly 80 percent of the enrollment, while at authorized institutions nearly 90 percent were enrolled full-time.

Program Offerings and Degrees Conferred:

Unaccredited institutions offer a wide array of courses, programs, and degree types. However, by and large, the unaccredited institutions tend to be single purpose institutions that offer specific degree programs in disciplines such as accupuncture, biological sciences, business, fine arts, law, music, psychology, and theology, among many others. In 1983-84, the most recent year for which data are available, unaccredited approved and authorized institutions conferred about 750 bachelors degrees, 650 masters degrees, and 1,000 doctorates. In addition these institutions awarded 50 first professional degrees in law, 60 in chiropractic medicine, and about 20 in theology.

Finance and Student Aid:

Generally speaking, unaccredited degree-granting institutions are not strictly regulated by the state and therefore are required to file only limited financial reports. Most unaccredited institutions, especially those which are authorized, are required only to periodically submit statements regarding their fiscal solvency. Therefore, very limited information exists regarding the revenues or expenditures for these institutions. Students enrolled in approved and authorized institutions are not eligible for either State Cal Grants or federal grants and loans.

Nondegree-Granting Institutions (Proprietary Schools)

In addition to its diverse independent degree-granting institutions, California has over 2,200 nondegree-granting schools operating in the state. These schools provide an alternative to public instruction by offering a broad range of courses, from short term vocational certificate programs through professional continuing education programs.

To qualify to operate in California, these schools must meet minimum standards set by the Department of Education with regard to length, quality, and content of courses; physical space; equipment and instructional materials; education, experience, and reputation of instructors and administrators; maintenance of student records; financial stability; honesty in advertising; and policies for refunding unused tuition and fees. Like their degree-granting counterparts, these institutions, often called "proprietary" or "career" schools, are categorized as either "licensed," "accredited," or "state-approved." About one-third are licensed by a governmental agency or are accredited by an accrediting agency approved by the United States Department of Education; the remaining two-thirds have either chosen not to obtain accreditation or have been unable to meet the standards developed by the accrediting agencies.

Licensed and Accredited Nondegree-Granting Institutions

A nondegree-granting, licensed institution is defined by Section 94311(b) of the Education Code as "accredited, approved, or licensed by a state board or agency." Examples of licensing boards and agencies include the Department

of Motor Vehicles (e.g., for truck driving schools), the Federal Aviation Administration (e.g., flight schools), or the State Board of Cosmotology (e.g., beauty schools).

A nondegree-granting accredited institution is defined by Section 94311(c) of the Education Code as "an institution which at the time of issuance of a diploma, has accreditation of the instruction, program, or specific course of study upon which the diploma is based by a national or applicable regional accrediting agency recognized by the United States Department of Education, and the administrative head of the institution has filed with the Superintendent an annual affidavit verifying that the institution, program, or course of study for which a diploma is issued is so accredited." Currently, California has 387 licensed and 265 accredited nondegree-granting institutions that together enroll approximately 200,000 students and employ an estimated 6,000 full-time faculty.

State-Approved Nondegree-Granting Institutions

In addition to the licensed and accredited nondegree-granting schools, California has 1,546 "approved" career schools. These institutions, as defined by Section 94311(d) of the Education Code, are schools that meet certain minimum educational and administrative criteria. These criteria include: (1) that the quality and content of each course or program of instruction, training, or study are such as may reasonably and adequately achieve the stated objective for which the course or program is offered; (2) that the institution has adequate space, equipment, instructional material, and instructor personnel to provide basic quality training; (3) that the institution maintains administrative records; (4) that the institution complies with local, county, state, and federal ordinances; and (5) that the faculty and administrative personnel at these institutions hold a Certificate of Authorization for Service provided by the Superintendent, which is issued to administrators to assure that they are of good moral character, and to faculty to assure that they are of good moral character and that they possess adequate academic, experiential, and professional qualifications.

State-approved institutions enroll about 200,000 students in a variety of vocational and career oriented programs and courses. An estimated 10,000 faculty are employed by these institutions.

Finance and Student Aid:

Comprehensive financial information is not readily available regarding the nondegree institutions. However, with respect to financial aid, many students enrolled in nondegree-granting institutions, specifically those which are licensed or accredited, are eligible to receive State Cal Grant B and C awards, as well as federally-insured Guranteed Student Loans.

According to the Student Aid Commission, students enrolled in proprietary schools (several of these institutions also award degrees) received 307 Cal Grant B awards, totaling $967,000, and 985 Cal Grant C awards, totaling $2,624,744, in 1985-86. In addition, students enrolled in these institutions have secured nearly 75,000 federally-insured Guranteed Student Loans totaling in excess of $180 million dollars.

The Need for a Vital Independent Sector: How this Sector Helps Service the Needs of the State

Diversity is the hallmark of the private sector. California's independent degree-granting colleges and universities, as well as its nondegree-granting schools, have contributed markedly to the State's higher education enterprise and to the State's economy. These independent institutions have created a competitive environment by offering a wide range of educational programs. Accredited independent institutions, especially, are regarded as comparative yardsticks to their public counterparts, thereby assuring that student choice is broadened. The vitality of this sector will depend on the development of State policy that assures quality, including an effective mechanism for institutional review, along with a continued commitment to student choice. Careful consideration must also be given regarding the implications of admissions, faculty recruitment, institutional financing, student aid allocations, and long-range planning policies in the public sector for institutions in the private sector.

APPENDIX A

SELECTED PERSONNEL FEATURES OF CALIFORNIA COLLEGES AND UNIVERSITIES AY 84-85
Source, The College Board. Prepared by John Minter Assoc, Boulder CO

SECTOR / TYPE / INSTITUTION	TOTAL FT FACULTY	TOTAL HC STUDENTS	TOTAL UG STUDENTS	TOTAL GD STUDENTS
Independent				
Comprehensive w/o medical school				
Antioch U Los Angeles	16	364	180	184
Antioch U San Francisco	16	268	99	169
Antioch U Santa Barbara	3	75	26	49
Azusa Pacific U	98	2,578	1,695	883
Biola U	151	3,025	2,059	966
C of Notre Dame	0	1,150	700	450
Calif Lutheran C	93	2,522	1,499	1,023
Chapman C	115	1,910	1,524	386
Dominican C of San Rafael	50	725	510	215
Golden Gate U	65	10,368	2,492	7,876
Holy Names C	46	690	470	220
John F Kennedy U	2	1,637	257	1,380
Loyola Marymount U	231	5,138	3,919	1,219
Mills C	67	938	739	199
Monterey Inst Interntnal Stds	30	435	100	335
Mount St Mary's C	73	1,218	1,078	140
New C of Calif	18	340	300	40
Pacific Oaks C	25	446	250	196
Pepperdine U	251	6,894	3,273	3,621
St Mary's C of Calif	85	2,795	2,212	583
U of La Verne	88	2,956	1,404	1,552
U of Redlands	116	1,272	1,206	66
U of San Diego	0	5,222	3,343	1,879
U of San Francisco	237	6,111	3,111	3,000
U of Santa Clara	283	7,448	3,595	3,853
West Coast U	0	1,190	670	520
Whittier C	81	1,651	1,056	595
Yeshiva U of Los Angeles	0	49	49	0
	2,240	69,415	37,816	31,599
Doctoral level w/medical school				
Stanford U	1,292	13,261	6,593	6,668
U of Southern Calif	1,257	32,156	16,078	16,078
U of the Pacific	274	4,149	3,751	398
	2,823	49,566	26,422	23,144
Doctoral level w/o medical school				
Calif Inst of Technology	594	1,816	817	999
International C	0	425	25	400
United States International U	0	3,451	1,548	1,903
	594	5,692	2,390	3,302
General baccalaureate institution				
Ambassador C	38	621	605	16
Bethany Bible C	0	545	545	0
Cal Baptist C	39	629	597	32
Christ C Irvine	25	395	395	0
Christian Heritage C	20	432	432	0
Claremont McKenna C	88	842	842	0
Los Angeles Baptist C	25	281	281	0
Occidental C	114	1,590	1,575	15
Pacific Coast Bapt Bible C	0	0	0	0
Pacific Union C	134	1,304	1,301	3
Pitzer C	63	781	781	0
Point Loma Nazarene C	100	1,884	1,696	188
Pomona C	184	1,338	1,338	0
Scripps C	53	604	604	0

SELECTED PERSONNEL FEATURES OF CALIFORNIA COLLEGES AND UNIVERSITIES AY 84-85
Source, The College Board. Prepared by John Minter Assoc, Boulder CO

SECTOR / TYPE / INSTITUTION	TOTAL FT FACULTY	TOTAL HC STUDENTS	TOTAL UG STUDENTS	TOTAL GD STUDENTS
Independent				
General baccalaureate institution				
Simpson C	23	293	260	33
Southern Calif C	41	917	868	49
St Joseph's C	19	115	115	0
Westmont C	60	1,208	1,208	0
World C West	10	100	100	0
	1,036	13,879	13,543	336
Multiprogram Two-year school				
C of the Ctr for Early Educatn	0	0	0	0
D-Q U	1	209	209	0
Deep Springs C	5	20	20	0
Don Bosco Technical Inst	21	282	282	0
Humphreys C	15	316	316	0
Marymount Palos Verdes C	39	755	755	0
Pacific Coast Jr C	0	190	190	0
	81	1,772	1,772	0
Other specialized schools				
Coleman C	37	771	764	7
Menlo C	41	640	640	0
Southrn Cal Inst Architecture	0	329	226	103
U of Judaism	22	161	60	101
	100	1,901	1,690	211
Single program Two-year school				
Amer Acad Dramatic Arts: West	0	218	218	0
Bay-Valley Tech	0	540	540	0
Brooks C	7	896	896	0
C of Oceaneering	30	110	110	0
Columbia C: Hollywood	0	425	425	0
Condie Jr C	11	800	800	0
Fashion Inst of Design & Merch	35	2,876	2,876	0
Heald C Business/Tech Division	0	555	555	0
Heald C Busn Div: S Francisco	0	0	0	0
Heald C Sacramento	0	0	0	0
Heald C Santa Rosa	0	0	0	0
Heald C Tech Div Contra Costa	0	450	450	0
Heald C Walnut Creek	0	0	0	0
Heald Inst Technology: San Francisco	0	900	900	0
Heald's 4C's C	0	0	0	0
ITT Tech Inst La Mesa	0	0	0	0
ITT Tech Inst West Covina	0	0	0	0
National Technical Sch	0	1,000	1,000	0
Sysorex Inst	11	19	19	0
	94	8,789	8,789	0
Specialized - Business and management school				
Armstrong C	30	525	300	225
National U	218	8,585	6,048	2,537
Pacific Christian C	15	490	424	66
Woodbury U	25	911	794	117
	288	10,511	7,566	2,945
Specialized - Divinity school				
Dominican Sch Philosophy/Theol	12	114	15	99

SELECTED PERSONNEL FEATURES OF CALIFORNIA COLLEGES AND UNIVERSITIES AY 84-85
Source, The College Board. Prepared by John Minter Assoc, Boulder CO

SECTOR / TYPE / INSTITUTION	TOTAL FT FACULTY	TOTAL HC STUDENTS	TOTAL UG STUDENTS	TOTAL GD STUDENTS
Independent				
Specialized - Divinity school				
Holy Family C	0	0	0	0
LIFE Bible C	14	450	450	0
Patten C	7	190	190	0
San Jose Bible C	11	175	175	0
St John's C	0	126	126	0
West Coast Christian C	18	220	220	0
West Coast Talmudical Seminary	0	55	55	0
	62	1,330	1,231	99
Specialized - Education school				
Fresno Pacific C	0	980	480	500
	0	980	480	500
Specialized - Engineering school				
Cogswell C	28	450	450	0
Grantham C of Engin	5	600	600	0
Harvey Mudd C	67	543	530	13
Northrop U	0	1,203	993	210
	100	2,796	2,573	223
Specialized - Fine arts school				
Art Ctr C of Design	49	1,509	1,504	5
Brooks Inst	18	694	675	19
Calif C of Arts & Crafts	0	843	774	69
Calif Inst of the Arts	0	842	632	210
Otis Art Inst Prsns Sch Design	0	814	796	18
San Francisco Art Inst	29	640	500	140
San Francisco Consrvtry Music	17	219	158	61
	113	5,561	5,039	522
Specialized - Law school				
U of West Los Angeles	4	611	161	450
Western SU C of Law: Orange Co	23	1,561	305	1,256
Western SU C of Law: San Diego	12	624	157	467
	39	2,796	623	2,173
Specialized - Medical school				
Loma Linda U	0	4,424	2,082	2,342
	0	4,424	2,082	2,342
	7,570	179,412	112,016	67,396

NUMBER OF DEGREES AWARDED BY CALIFORNIA COLLEGES AND UNIVERSITIES AY 84-85
Source, The College Board. Prepared by John Minter Associates, Boulder CO

SECTOR U.S. DEPT OF EDUCATION CLASSIFICATION	AA DEG	BA DEG	MA DEG	DR DEG	FP DEG
Independent					
Comprehensive w/o medical school					
Antioch U Los Angeles	0	108	79	0	0
Antioch U San Francisco	0	83	82	0	0
Antioch U Santa Barbara	0	10	27	0	0
Azusa Pacific U	6	263	250	0	0
Biola U	0	392	126	19	19
C of Notre Dame	0	190	90	0	0
Calif Lutheran C	0	260	240	0	0
Chapman C	0	740	290	0	0
Dominican C of San Rafael	0	86	23	0	0
Golden Gate U	24	314	1,815	16	16
Holy Names C	89	43	39	0	0
John F Kennedy U	0	39	225	0	0
Loyola Marymount U	0	751	304	0	0
Mills C	0	181	45	0	0
Monterey Inst Interntnal Stds	24	106	129	0	0
Mount St Mary's C	70	190	30	0	0
New C of Calif	3	100	2	0	0
Pacific Oaks C	0	25	60	0	0
Pepperdine U	0	540	1,290	20	20
St Mary's C of Calif	0	492	85	0	0
U of La Verne	50	500	510	10	10
U of Redlands	0	220	11	0	0
U of San Diego	0	579	211	6	6
U of San Francisco	0	1,290	810	60	60
U of Santa Clara	0	829	508	1	1
West Coast U	20	200	0	0	0
Whittier C	0	330	40	0	0
Yeshiva U of Los Angeles	0	3	0	0	0
	286	8,864	7,321	132	132
Doctoral level w/medical school					
Stanford U	0	1,700	1,800	450	450
U of Southern Calif	0	2,780	2,760	390	390
U of the Pacific	0	638	168	14	14
	0	5,118	4,728	854	854
Doctoral level w/o medical school					
Calif Inst of Technology	0	213	147	123	123
International C	0	6	30	126	126
United States International U	14	220	427	184	184
	14	439	604	433	433
General baccalaureate institution					
Ambassador C	0	172	0	0	0
Bethany Bible C	0	116	0	0	0
Cal Baptist C	0	139	0	0	0
Christ C Irvine	4	48	0	0	0
Christian Heritage C	0	67	0	0	0
Claremont McKenna C	0	202	0	0	0
Los Angeles Baptist C	10	60	0	0	0
Occidental C	0	375	10	0	0
Pacific Coast Bapt Bible C	0	0	0	0	0
Pacific Union C	110	198	8	0	0
Pitzer C	0	160	0	0	0
Point Loma Nazarene C	0	280	64	0	0
Pomona C	0	340	0	0	0
Scripps C	0	134	0	0	0

NUMBER OF DEGREES AWARDED BY CALIFORNIA COLLEGES AND UNIVERSITIES AY 84-85
Source, The College Board. Prepared by John Minter Associates, Boulder CO

SECTOR / U.S. DEPT OF EDUCATION CLASSIFICATION	AA DEG	BA DEG	MA DEG	DR DEG	FP DEG
Independent					
General baccalaureate institution					
Simpson C	0	36	1	0	0
Southern Calif C	0	140	3	0	0
St Joseph's C	0	14	0	0	0
Westmont C	0	176	0	0	0
World C West	0	4	0	0	0
	124	2,661	86	0	0
Multiprogram Two-year school					
C of the Ctr for Early Educatn	6	0	2	0	0
D-Q U	6	0	0	0	0
Deep Springs C	1	0	0	0	0
Don Bosco Technical Inst	112	0	0	0	0
Humphreys C	26	5	6	0	0
Marymount Palos Verdes C	125	0	0	0	0
Pacific Coast Jr C	0	0	0	0	0
	276	5	8	0	0
Other specialized schools					
Coleman C	174	200	3	0	0
Menlo C	130	70	0	0	0
Southrn Cal Inst Architecture	0	58	27	0	0
U of Judaism	0	14	11	0	0
	304	342	41	0	0
Single program Two-year school					
Amer Acad Dramatic Arts: West	12	0	0	0	0
Bay-Valley Tech	0	0	0	0	0
Brooks C	350	0	0	0	0
C of Oceaneering	92	0	0	0	0
Columbia C: Hollywood	34	45	0	0	0
Condie Jr C	375	0	0	0	0
Fashion Inst of Design & Merch	749	0	0	0	0
Heald C Business/Tech Division	0	0	0	0	0
Heald C Busn Div: S Francisco	0	0	0	0	0
Heald C Sacramento	0	0	0	0	0
Heald C Santa Rosa	0	0	0	0	0
Heald C Tech Div Contra Costa	0	0	0	0	0
Heald C Walnut Creek	0	0	0	0	0
Heald Inst Technology: San Francisco	0	0	0	0	0
Heald's 4C's C	0	0	0	0	0
ITT Tech Inst La Mesa	0	0	0	0	0
ITT Tech Inst West Covina	0	0	0	0	0
National Technical Sch	0	0	0	0	0
Sysorex Inst	7	0	0	0	0
	1,619	45	0	0	0
Specialized - Business and management school					
Armstrong C	20	70	50	0	0
National U	208	1,278	907	0	0
Pacific Christian C	10	68	18	0	0
Woodbury U	7	130	59	0	0
	245	1,546	1,034	0	0
Specialized - Divinity school					
Dominican Sch Philosophy/Theol	0	10	13	0	0

NUMBER OF DEGREES AWARDED BY CALIFORNIA COLLEGES AND UNIVERSITIES AY 84-85
Source, The College Board. Prepared by John Minter Associates, Boulder CO

SECTOR U.S. DEPT OF EDUCATION CLASSIFICATION	AA DEG	BA DEG	MA DEG	DR DEG	FP DEG
Independent					
Specialized - Divinity school					
Holy Family C	0	0	0	0	0
LIFE Bible C	0	45	0	0	0
Patten C	0	14	0	0	0
San Jose Bible C	12	24	0	0	0
St John's C	0	16	0	0	0
West Coast Christian C	18	12	0	0	0
West Coast Talmudical Seminary	0	0	0	0	0
	30	121	13	0	0
Specialized - Education school					
Fresno Pacific C	5	85	75	0	0
	5	85	75	0	0
Specialized - Engineering school					
Cogswell C	30	80	0	0	0
Grantham C of Engin	10	5	0	0	0
Harvey Mudd C	0	100	15	0	0
Northrop U	32	155	99	0	0
	72	340	114	0	0
Specialized - Fine arts school					
Art Ctr C of Design	0	208	2	0	0
Brooks Inst	0	250	0	0	0
Calif C of Arts & Crafts	183	33	13	0	0
Calif Inst of the Arts	0	137	68	0	0
Otis Art Inst Prsns Sch Design	10	100	10	0	0
San Francisco Art Inst	0	120	50	0	0
San Francisco Consrvtry Music	0	29	16	0	0
	193	877	159	0	0
Specialized - Law school					
U of West Los Angeles	7	78	0	0	0
Western SU C of Law: Orange Co	0	50	0	0	0
Western SU C of Law: San Diego	0	17	0	0	0
	7	145	0	0	0
Specialized - Medical school					
Loma Linda U	140	500	300	25	25
	140	500	300	25	25
	3,315	21,088	14,483	1,444	1,444

SELECTED FINANCIAL STATISTICS FY84, CALIFORNIA COLLEGES & UNIVERSITIES
Revenue, Expenditures, Capital in $000; Endowment/Student in $

SECTOR U. S. DEPT OF EDUCATION CLASSIFICATION D D	TOTAL REVENUE	TOTAL EXPENDITURES	E & G EXPENDITURES	ENDOWMENT CAPITAL	ENDOW/STUDENT
PRIVATE INSTITUTIONS					
Comprehensive w/o medical school					
YESHIVA U OF LOS ANGELES	621	415	415	0	0
PACIFIC OAKS COLLEGE	2296	1956	1908	920	3802
MONTEREY INTRNATL STDIES	3317	3114	2936	798	1942
WEST COAST U MAIN CAMPUS	3402	3526	3321	0	0
JOHN F KENNEDY UNIVERSITY	4412	4323	4323	52	31
HOLY NAMES COLLEGE	5453	5417	4249	2402	3819
COLLEGE OF NOTRE DAME	5929	6029	5189	2064	1518
DOMINICAN C OF SAN RAFAEL	7109	7268	6139	2890	4676
MOUNT SNT MARY'S COLLEGE	9463	9567	7732	7289	6632
AZUSA PACIFIC UNIVERSITY	12592	12864	10983	585	237
CAL LUTHERAN COLLEGE	13169	13165	10961	1500	608
MILLS COLLEGE	14879	13959	11170	34179	37518
WHITTIER COLLEGE	15937	15378	13676	14076	9134
SNT MARY'S COLLEGE OF CAL	18224	17354	13683	6964	2356
BIOLA UNIV	20557	18832	15952	7448	2406
UNIVERSITY OF REDLANDS	20700	19967	17261	18082	6865
UNIVERSITY OF LA VERNE	21147	20011	18685	3447	864
CHAPMAN COLLEGE	24647	25604	23871	5641	1010
GOLDEN GATE UNIVERSITY	26244	25709	23446	2229	204
UNIVERSITY OF SAN DIEGO	40278	36888	30961	4416	883
LOYOLA MARYMOUNT UNIV	40790	39567	35536	15453	2402
U OF SAN FRANCISCO	45003	45037	39184	11475	1836
UNIVERSITY OF SANTA CLARA	53290	51169	43047	45582	6304
PEPPERDINE UNIVERSITY	59122	55194	50587	53749	8270
	468581	452313	395215	241241	
Doctoral level w/medical school					
UNIVERSITY OF THE PACIFIC	70149	68770	56038	13184	2198
UNIV OF STHN CALIFORNIA	422768	422505	371216	227442	7733
STANFORD UNIVERSITY	801590	754776	506198	1034142	75025
	1294507	1246051	933452	1274768	
Doctoral level w/o medical school					
RAND GRAD INST POL STDIES	334	450	450	0	0
INTERNATIONAL COLLEGE	2775	3143	3143	0	0
CLAREMONT GRADUATE SCHOOL	14821	12271	12056	37886	22975
US INTERNATIONAL U	14488	13710	11989	3213	1455
CAL INST OF TECHNOLOGY	622303	622303	112262	246966	136445
	654721	651877	139900	288065	
General baccalaureate institution					
WORLD COLLEGE WEST	880	1027	1027	0	0
SNT JOSEPH'S COLLEGE	1609	1606	1281	1006	9960
SIMPSON COLLEGE	1803	1688	1448	20	65
CHRISTIAN HERITAGE C	2108	2129	1755	41	119
LOS ANGELES BAPT COLLEGE	2392	2377	1897	0	0
CHRIST COLLEGE IRVINE	2824	2688	2417	0	0
BETHANY BIBLE COLLEGE	3008	2949	2397	346	677
CAL BAPTIST COLLEGE	5084	5304	4198	597	905

SELECTED FINANCIAL STATISTICS FY84, CALIFORNIA COLLEGES & UNIVERSITIES
Revenue, Expenditures, Capital in $000; Endowment/Student in $

SECTOR / U. S. DEPT OF EDUCATION CLASSIFICATION	TOTAL REVENUE	TOTAL EXPENDITURES	E & G EXPENDITURES	ENDOWMENT CAPITAL	ENDOW/STUDENT
PRIVATE INSTITUTIONS					
General baccalaureate institution					
SOUTHERN CAL COLLEGE	5686	5439	4279	3027	4091
PITZER COLLEGE	9795	9653	8065	8078	10916
SCRIPPS COLLEGE	9535	9689	7901	20711	35709
WESTMONT COLLEGE	11360	11508	8103	2778	2751
POINT LOMA NAZARENE COL	12186	11812	8790	8562	4579
CLAREMONT MCKENNA C	14697	13403	11210	44870	54060
PACIFIC UNION COLLEGE	24145	23730	11689	1651	1037
OCCIDENTAL COLLEGE	26063	23843	19143	69474	43612
POMONA COLLEGE	26586	25183	21461	111771	80411
	159761	154028	117061	272932	
Multiprogram Two-year school					
CENTER FOR EARLY ED	77	133	133	0	0
DEEP SPRINGS COLLEGE	321	365	365	1691	70458
D-Q UNIVERSITY	1058	647	647	0	0
PACIFIC COAST JR COLLEGE	923	875	825	0	0
HUMPHREYS COLLEGE	981	951	866	0	0
AMERICAN CONSV THEATRE	999	1491	1376	5863	70639
DON BOSCO TECHNICAL INST	2917	2892	2671	0	0
MARYMOUNT PALOS VERDES C	4172	4029	3075	1759	3350
	11448	11383	9958	9313	
Other specialized schools					
PACIFIC GRAD SCH PSYC	610	593	593	0	0
SAYBROOK INSTITUTE	810	737	737	50	325
CA INST INTEGRAL STDIES	950	903	869	0	0
CAL SCH PROF PSYC FRESNO	1010	1034	1034	11	59
STHN CAL INSTITUTE ARCH	1894	1911	1911	47	118
FIELDING INSTITUTE	1977	1931	1910	0	0
UNIVERSITY OF JUDAISM	1889	2057	2057	1590	7644
CAL SCH PSYC BERKELEY	2130	2180	2180	24	74
CAL SCH PROF PSYC SN DEGO	2271	2324	2324	25	78
THE WRIGHT INSTITUTE	2400	2407	2407	0	0
CAL SCH PROF PSYC LOS ANG	2420	2477	2477	27	95
COLEMAN COLLEGE	4894	3709	3709	0	0
MENLO COLLEGE	7272	7057	5007	5427	8427
	30527	29320	27215	7201	
Single program Two-year school					
SN FRISCO C MORTUARY SCI	217	272	272	0	0
AMER ACAD DRAMATIC ARTS-W	904	892	892	0	0
CONDIE JC BUS & TECH	1291	894	894	0	0
COLUMBIA C-HOLLYWOOD	957	1120	1102	0	0
NATIONAL TECHNICAL SCHOOL	1760	1420	1420	0	0
COLLEGE OF OCEANEERING	1460	1493	1390	0	0
HEALD INST TECH-SN FRISCO	1856	1856	1856	0	0
BROOKS COLLEGE	5417	3962	3501	0	0
BAY-VALLEY TECH	5417	3962	3501	0	0
FASH INST DESIGN & MERCH	7777	8244	7619	0	0
	27056	24115	22447	0	

SELECTED FINANCIAL STATISTICS FY84, CALIFORNIA COLLEGES & UNIVERSITIES
Revenue, Expenditures, Capital in $000; Endowment/Student in $

SECTOR U. S. DEPT OF EDUCATION CLASSIFICATION D D	TOTAL REVENUE	TOTAL EXPENDITURES	E & G EXPENDITURES	ENDOWMENT CAPITAL	ENDOW/STUDENT
PRIVATE INSTITUTIONS					
Specialized - Business and management school					
ARMSTRONG COLLEGE	1622	1591	1514	0	0
W COAST U ORANGE CO CTR	2335	2420	2280	0	0
PACIFIC CHRISTIAN COLLEGE	2114	3584	2457	140	305
WOODBURY UNIVERSITY	4442	4187	3958	2678	2470
NATIONAL UNIVERSITY	27443	26302	24292	500	73
	37956	38084	34501	3318	
Specialized - Divinity school					
HOLY FAMILY COLLEGE	140	130	130	0	0
DOMINICAN SCH PHIL & THEO	325	337	322	225	2419
FRANCISCAN SCH THEOLOGY	361	352	346	137	895
YESH O EL CH W CT TAL SEM	562	401	335	0	0
STARR KNG SCH FOR MINSTRY	432	417	417	0	0
PATTEN COLLEGE	482	490	384	72	504
SAINT JOHN'S COLLEGE	928	928	928	0	0
PACIFIC LUTH THEOL SEM	952	951	894	460	2674
MENNONITE BRTHREN BIB SEM	999	976	968	0	0
SAINT PATRICK'S SEMINARY	1076	1009	808	4530	52069
SAN JOSE BIBLE COLLEGE	1081	1055	858	58	309
WEST COAST CHRISTIAN C	1366	1141	1003	0	0
AMER BAPT SEM OF WEST	1274	1458	1458	2023	13762
L.I.F.E. BIBLE COLLEGE	1693	1576	1259	275	600
JESUIT SCHOOL OF THEOLOGY	2291	2195	1861	39	242
CHURCH DIV SCH OF PACIFIC	1681	2263	2055	4883	47408
GRADUATE THEOL UNION	2845	2738	2068	1029	2715
PACIFIC SCH OF RELIGION	3017	2908	2498	15179	64046
SCH OF THEO AT CLAREMONT	2786	3106	2850	2076	8405
GOLDEN GATE BAPT SEMINARY	3605	3609	2842	5450	9545
SAN FRANCISCO THEOL SEM	5033	5167	4764	16625	17228
FULLER THEOLOGICAL SEM	13526	14108	11564	12405	4547
	46655	47315	40612	65466	
Specialized - Education school					
FRESNO PACIFIC COLLEGE	5176	5291	4601	505	622
	5176	5291	4601	505	
Specialized - Engineering school					
GRANTHAM C OF ENGR	2159	2004	1605	1	0
COGSWELL COLLEGE	3338	2580	2580	1329	2914
HARVEY MUDD COLLEGE	10617	10748	9182	18781	36825
NORTHROP UNIVERSITY	11754	10784	9109	243	168
	27868	26116	22476	20354	
Specialized - Fine arts school					
SAN FRANCISCO CONSV MUSIC	3054	3099	3067	4193	19502
BROOKS INSTITUTE	3457	3358	3358	0	0
SAN FRANCISCO ART INST	4350	4226	3766	1418	2240

SELECTED FINANCIAL STATISTICS FY84, CALIFORNIA COLLEGES & UNIVERSITIES
Revenue, Expenditures, Capital in $000; Endowment/Student in $

SECTOR U. S. DEPT OF EDUCATION CLASSIFICATION D D	TOTAL REVENUE	TOTAL EXPENDITURES	E & G EXPENDITURES	ENDOWMENT CAPITAL	ENDOW/STUDENT
PRIVATE INSTITUTIONS					
Specialized - Fine arts school					
OTIS ART INST PARSON SCH	4814	5107	4609	164	262
CAL COLLEGE ARTS & CRAFTS	5591	5410	5107	175	168
ART CTR COLLEGE OF DESIGN	8271	7936	7505	3394	2303
AMER FILM INST CTR ADV	11637	11445	3430	146	1259
CALIFORNIA INST OF ARTS	10871	11634	10942	17300	20163
	52045	52215	41784	26790	
Specialized - Law school					
C LAW-U SAN FERNANDO VLY	828	811	811	0	0
LINCOLN UNIVERSITY	1232	1136	1078	0	0
NEW COLLEGE OF CALIFORNIA	2537	2507	2507	0	0
WSTN ST U C LAW SAN DIEGO	2300	2669	2650	0	0
U OF WEST LOS ANGELES	2770	2851	2408	0	0
CALIFORNIA WSTN SCHL LAW	4687	4167	3962	1448	1883
WSTN ST U C LAW ORANGE CO	5628	6482	6436	0	0
STHWSTN U SCHOOL OF LAW	8586	7871	7871	341	222
	28568	28494	27723	1789	
Specialized - Medical school					
COLLEGE OSTEO MED PACIFIC	5831	5474	5369	599	2080
LOMA LINDA UNIVERSITY	79870	81323	59349	10111	1961
	85701	86797	64718	10710	
Specialized - Other health institution					
PASADENA COLLEGE CHIRO	1556	1086	1050	566	3127
LIFE CHIRO COL-WEST	2109	2077	1937	0	0
PALMER COLLEGE CHIRO-WEST	3594	3548	3205	0	0
CLEVELAND CHIROPRACTIC C	5172	3970	3313	941	1548
STHN CAL C OF OPTOMETRY	4774	5431	5384	572	1412
LOS ANG C OF CHIROPRACTIC	6467	6203	6203	523	736
CAL COLLEGE PODIATRIC MED	8107	8287	4729	47	111
	31779	30602	25821	2649	
	2962349	2884001	1907484	2225101	

APPENDIX B

Description of State and Federal Student Financial Aid Programs

State Programs

Cal Grant A was established in 1955 as the California Scholarship program, and provides grants to needy, academically able students to assist them in completing a four-year program at a California college or university of their choice. The Cal Grant B Program provides grants which cover (1) subsistence costs and (2) tuition and fees. It differs from the Cal Grant A program in that the selection of grant winners is based not only on the students grade point average and family income, but also on the level of parental education, family size, and student's career and life goals. The Cal Grant C Program provides financial aid to needy students in order to assist them in completing their vocational training. The Graduate Fellowship program provides grants to qualified students in order to cover a portion of the tuition and fees they incur in seeking a postgraduate degree.

Federal Programs

One of the largest programs is the Basic Educational Opportunity Grant (BEOG), more commonly known as the Pell Grant program, by which awards are granted directly to students based on their need. Generally, awards range from $200 to $1800 and are awarded to students whose family earns less than $25,000 per year.

In addition, students can receive federal aid through several campus-based programs. One of these programs is the Supplemental Educational Opportunity Grant program (SEOG) which is designed for the undergraduate student with serious money problems, and who could not continue his or her schooling without this aid. SEOG's range from $200 to $1500 per year. Another campus-based program is the National Direct Student Loan program (NDSL). This program provides low interest loans (3% interest) to needy students through the institution. Students may borrow up to $5000 for four years of college. The last large institutional based program is College Work Study program (CWS). Through the CWS program, students work at jobs on the campus or off campus at nonprofit organizations. Preference for this program is given to students with the greatest financial need and who meet specific qualifications.

Finally, the largest federally-backed program is the Guaranteed Student Loan program (GSL) which provides low interest loans to college students. The maximum GSL loan is $2500 per year for undergraduate students and $5000 per year for graduate students. Any student whose family earns less than $30,000 per year can qualify for a loan, while students whose families earn in excess of $30,000 must show demonstrated need in order to qualify.

BACKGROUND PAPER NUMBER 7:

WHO ARE THE FACULTY AND STAFF OF POSTSECONDARY EDUCATION IN CALIFORNIA: NUMBER OF EMPLOYEES; MAJOR CHARACTERISTICS OF ADMINISTRATORS AND FACULTY; FACULTY SUPPLY AND DEMAND; IMPLICATIONS FOR POLICY.

Introduction

Background Paper Number 2 describes how the increasing diversity of California's population will be one of the major factors to influence postsecondary education through the year 2000. The growth of the minority population, the aging of the population generally, and significant regional shifts in both factors will produce particular challenges for faculty, administrators, and staff. The need to prepare the state to meet this challenge will become even more important as postsecondary institutions anticipate the replacement of the current generation of faculty in the near future. This background paper highlights the major characteristics of current faculty and staff in California's colleges and universities as a basis for preparing for the future.

Nature and Numbers of Public Postsecondary Employees

In the Fall of 1983, the last year for which complete data are available, a total of 117,074 persons were employed full-time by California's public postsecondary institutions. They were distributed among the occupational categories as follows:

- 4.7 percent of the employees were in executive, administrative, or managerial positions. These positions include presidents, vice presidents, deans, directors, and their professional staffs, such as assistant or associate deans or department heads. Responsibilities of these positions are related to institutional management and are administrative as opposed to academic.

- 33 percent of the employees were in faculty positions. These positions include both tenured and nontenured teachers at all ranks along the path to full professorship. Also included are deans and department heads whose responsibilities are primarily instructional as opposed to managerial or administrative. This category does not include student teachers or teaching assistants.

- 16.9 percent of the employees were in other professional nonfaculty positions. These positions such as librarians, nurses, counselors, and researchers require a college degree or equivalent experience and do not fall within either of the previous two categories or within the categories that follow.

- 23.9 percent of the employees worked in clerical and secretarial positions including bookkeepers, stenographers, typists, and payroll clerks. Also included are sales clerks and library clerks (not librarians).

- 9.2 percent of the employees worked in technical and paraprofessional positions such as computer programmers, drafters, engineering aides, practical, licensed, or vocational nurses, technicians, and others. Also included are positions that have some of the responsibilities of professionals but require less education or experience.

- 2.8 percent of the employees were in skilled crafts positions, typically requiring special manual skills acquired through specialized training or on-the-job experience. Examples are mechanics, electricians, carpenters, and typesetters.

- 9.5 percent of the employees were in service and maintenance positions that contribute to the comfort, convenience, and hygiene of the institutional employees and students or are responsible for upkeep and care of buildings, facilities, and grounds. Included are chauffeurs, dry cleaning operators, food service staff, bus and truck drivers, security personnel, and others.

Of the full-time employees, roughly half were women, who were employed most frequently in the secretarial/clerical, professional nonfaculty, and technical/paraprofessional occupations. Men were more concentrated in skilled crafts, faculty, service maintenance, and administration. Ethnic minority women tended to have greater representation in the secretarial/clerical occupations, while ethnic minority men were most frequently employed in the service/maintenance occupations. Display 1 lists the number and percentage of men and women of each ethnic group in the seven occupational categories in the fall of 1983.

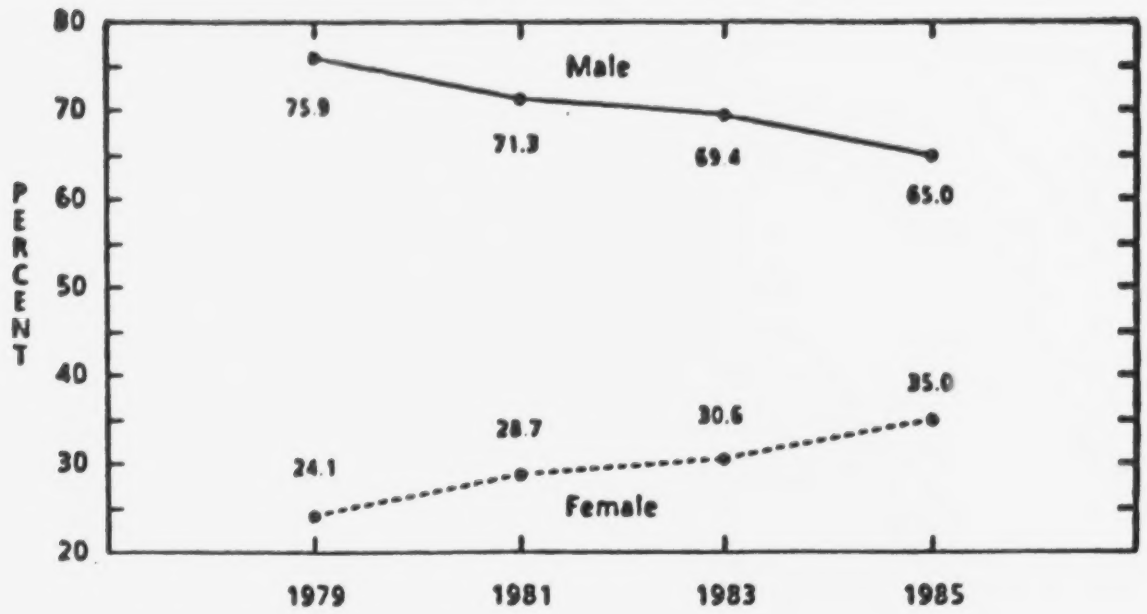
Display 1: California Public Postsecondary Full-Time Staff by Occupational Categories, 1983

Categories	Grand Total	MALE Total	MALE White (Non-Hispanic)	MALE Black (Non-Hispanic)	MALE Hispanic	MALE Asian or Pacific Islander	MALE American Indian or Alaskan Native	FEMALE Total	FEMALE White (Non-Hispanic)	FEMALE Black (Non-Hispanic)	FEMALE Hispanic	FEMALE Asian or Pacific Islander	FEMALE American Indian or Alaskan Native
Exec./Admin./ Managerial	5,552	3,854	3,191	269	260	116	18	1,698	1,386	153	77	69	13
Percent	100.0	69.4	57.4	4.8	4.7	3.0	0.4	30.6	25.0	2.7	1.4	1.2	0.2
Faculty	38,622	28,530	24,971	732	1,086	1,633	108	10,092	8,553	525	411	543	60
Percent	100.0	73.8	64.6	1.9	2.8	4.2	0.3	26.1	22.1	1.4	1.1	1.4	0.1
Professional/ Non-Faculty	19,804	7,188	5,459	466	520	702	41	12,616	9,697	737	566	1,567	49
Percent	100.0	36.3	27.5	2.3	2.6	3.5	0.2	63.7	48.9	3.7	2.8	7.9	0.2
Secretarial/ Clerical	27,993	3,245	1,920	495	456	348	26	24,748	16,955	2,960	2,770	1,868	195
Percent	100.0	11.6	6.8	1.8	1.6	1.2	0.1	88.4	60.5	10.6	9.9	6.8	0.7
Technical/ Paraprofessional	10,726	4,962	3,548	510	441	432	31	5,764	3,793	771	568	588	44
Percent	100.0	46.2	33.1	4.7	4.1	4.0	0.3	53.7	35.3	7.2	5.3	5.5	0.4
Skilled Crafts	3,232	2,961	2,201	246	330	140	44	271	200	23	32	13	3
Percent	100.0	91.6	68.1	7.6	10.2	4.3	1.4	8.4	6.2	0.7	1.0	0.4	0.0
Service/ Maintenance	11,145	8,189	3,646	2,051	1,688	728	76	2,956	1,173	1,047	508	199	29
Percent	100.0	73.5	32.7	18.4	15.1	6.5	0.7	26.5	10.5	9.4	4.5	1.8	0.3
Total	117,074	58,929	44,936	4,769	4,781	4,099	344	58,145	41,757	6,216	4,932	4,847	393
	100.0	50.3	38.4	4.1	4.1	3.5	0.3	49.6	35.6	5.3	4.2	4.1	0.3

Executive/Administrative Staff (Public postsecondary institutions only)

Available data, shown in displays 2 through 5, demonstrate the demographic trends for public postsecondary administration employees. Between 1979 and 1985, the number of full-time executive/administrative staff in California's public postsecondary institutions grew from 5,479 to 6,862 -- a percentage increase of 25.2 percent. This occupational category is dominated by white males, although women continue to make steady gains. In 1979, women represented 24.1 percent of all executive/ administrative staff, but by fall 1985 they represented 35 percent. In the same period, ethnic minorities made very modest gains.

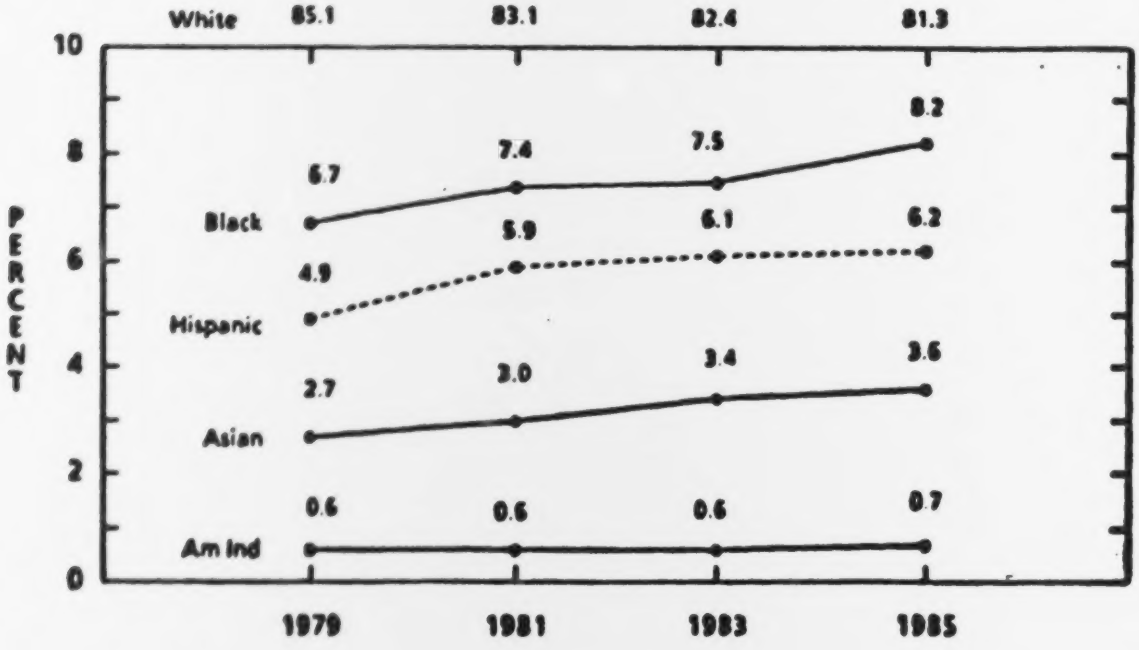
Display 2: Percent of Males and Females Employed as Executive/ Administrative Staff in California's Public Postsecondary Institutions, 1979, 1981, 1983, and 1985.



Source: California Postsecondary Education Commission

Between 1979 and 1985, representation of whites in this occupational category dropped slightly, from 85.1 percent to 81.3 percent. Broken down by ethnic minority group, Blacks increased their representation from 6.7 percent to 8.2 percent, Hispanics increased from 4.9 percent to 6.2 percent, and Asians increased from 2.7 percent to 3.6 percent. American Indians experienced no significant increase in representation during this period. Display 4 demonstrates the breakdown of ethnic group representation by segment. In every minority group, men held a greater share of the positions of executive/administrative staff than did women.

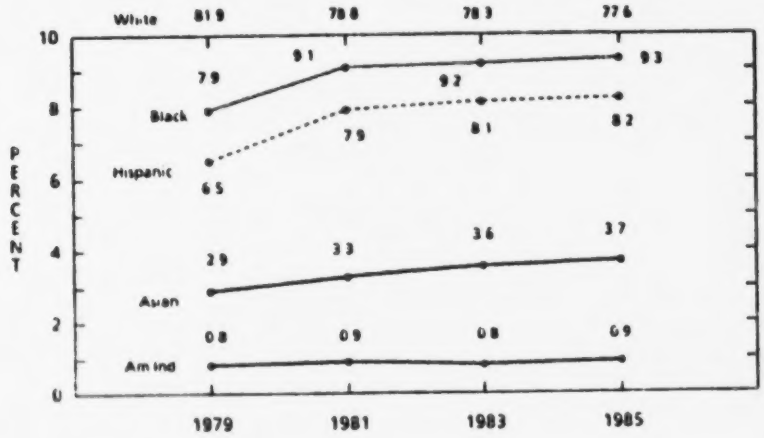
Display 3: Percent Ethnic Minority Employed as Executive/Administrative Staff in California's Public Postsecondary Institutions, 1979, 1981, 1983, and 1985.



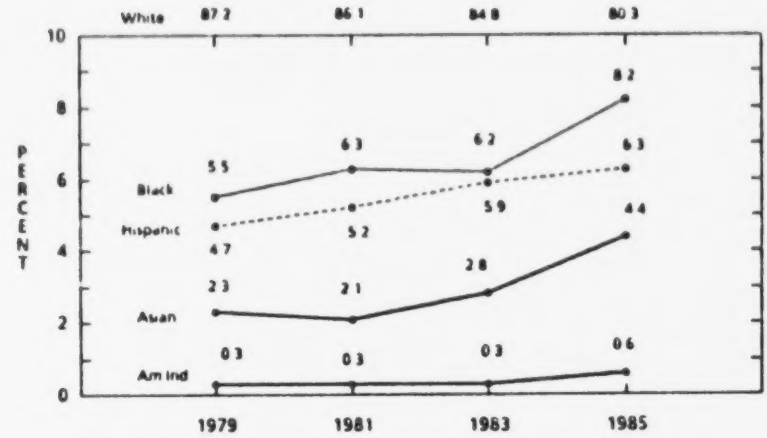
Source: California Postsecondary Education Commission

Display 4: Percent Ethnic Minority Employed as Executive/Administrative Staff in California's Public Segments, 1979, 1981, 1983, and 1985.

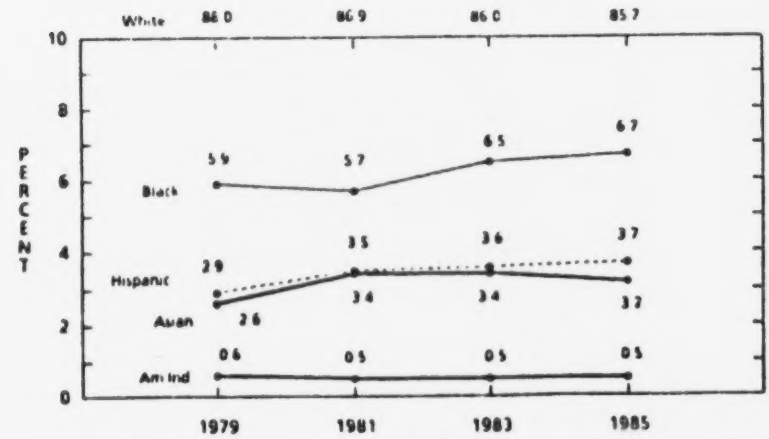
California Community Colleges



California State University



University of California



Source: California Postsecondary Education Commission

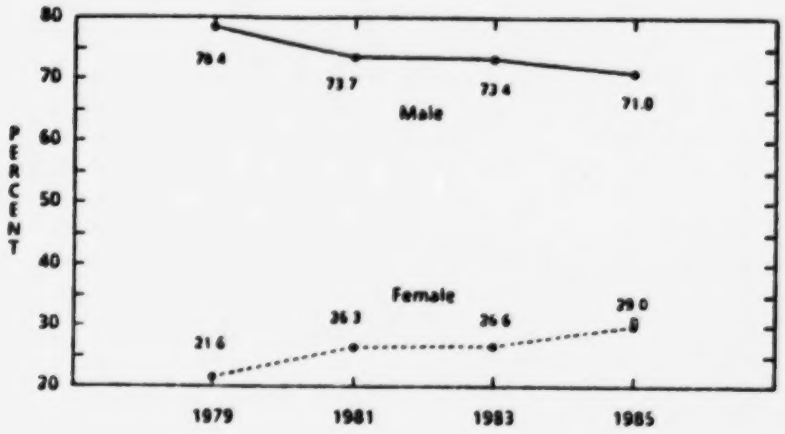
During the same six year period, the representation of women administrators in the Community Colleges had increased from 26.6 percent to 29.0 percent. In the University, representation increased from 33.3 percent to 42.8 percent, and in the State University there was an increase from 33.3 percent to 42.8 percent. Overall, the representation of women in each segment is shown in display 5.

Useful though these data are, it is important to note that over the period studied there may have occurred definitional changes within the occupational categories. Since these definitions determine what type of occupations get included and excluded in a particular category, definitional changes may affect the increase or decrease in the percentage reported.

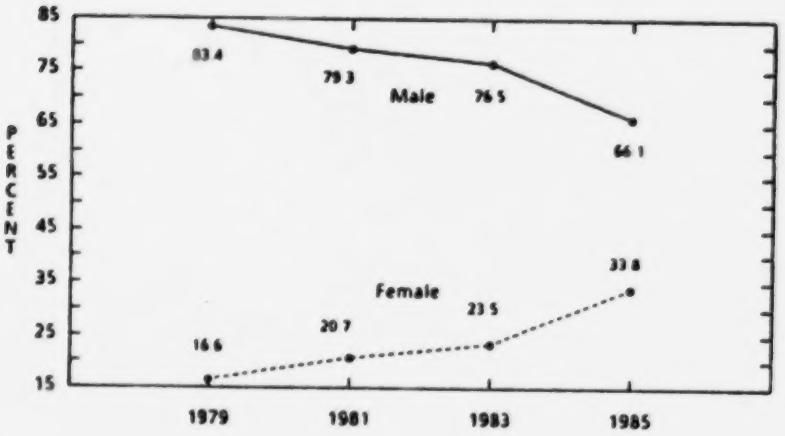
For example, in previous years professional nonfaculty and faculty category members with managerial responsiblity have been included in the administrative category. This caused increases in the percentages of women and minorities reported in the administrative category.

Display 5: Percent of Males and Females Employed as Executive/ Administrative Staff in California's Public Segments, 1979, 1981, 1983, and 1985.

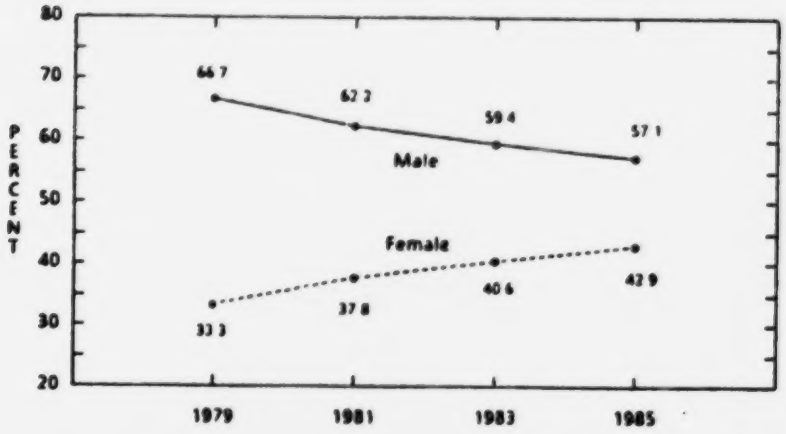
California Community Colleges



California State University



University of California



Source: California Postsecondary Education Commission

Age Distribution and Salary of Administrators

Forty-seven percent of University administrators are between the ages of 45-65. In the State University, 48 percent fall in that age group, and in the Community Colleges, 60 percent. In other words, roughly half of the administrators of the three segments will reach retirement age within the next two decades.

In 1985-86, the average annual salary for administrators at the University of California was $49,281; for CSU, $44,720; and for the Community Colleges, $46,734. These averages obscure important differences among the segments, however. For example, in 1985-86 the average salary for a Chief Executive Officer at a single institution in the University of California was $106,533, and the average salary for a UC dean of graduate programs was $85,100. In the State University, the average salary for a chief executive officer of an institution was $91,200, and the average salary of a social science dean was $62,947.

In 1983, white males represented 71.6 percent of all administrators earning $30,000 and over at UC, while women (both white and ethnic minority) represented 28.3 percent and minority males represented 8.2 percent. In the State University, white males represented 69.5 percent of all administrators earning $30,000 and over; women represented 18.3 percent and minority males represented 12.2 percent. In the Community Colleges, white males represented 59.8 percent of all administrators earning $30,000 and over. Women represented 24.4 percent and minority males represented 15.7 percent.

In summary, a significant majority of the administrators in public postsecndary education are white males between the ages of 45 and 65 making over $30,000 per year. Women and ethnic minorities are represented in smaller comparative percentages and in the lower salary ranges.

Faculty

In the fall of 1985, a total of 91,580 faculty (full-time and part-time) were employed by California's colleges and universities. This statewide total included 77,725 individuals in the public postsecondary institutions and 13,855 individuals in the independent colleges and universities.* Of this total, 52.5 percent were employed full-time and 47.5 percent were part-time. Display 6 shows the number and percentage of full-time and part-time faculty statewide and in each of the four segments. Both the Community Colleges and the independents had greater proportions of part-time faculty than the State University and the University.

Display 6: All Faculty in California's Postsecondary Institutions by Full-Time and Part-Time Base, Fall 1985

Faculty	Full-Time	Part-Time	Total
State Total	48,076 (52.5)	43,504 (47.5)	91,588 (100)
California Community Colleges	16,785 (40.4)	24,774 (59.6)	41,559 (100)
California State University	11,725 (61.2)	7,410 (38.7)	19,135 (100)
University of California	12,721 (74.6)	4,310 (25.3)	17,031 (100)
Independent Institutions	6,845 (49.4)	7,010 (50.6)	13,855 (100)

Source: California Postsecondary Education Commission, Faculty and Staff Report, 1985.

Tenure Status and Academic Rank

In the fall of 1985, there were 30,285 tenured faculty in California's public postsecondary institutions, of whom 74.7 percent were males and 25.3 percent females. Ethnic minorities held 13.2 percent of the tenured faculty positions. Asians (4.7%) were better represented than Hispanics (4.3%), Blacks (3.7%), and American Indians (0.5%).

*The figure for independents consists of faculty employed by the 60 collegiate institutions in the Association of Independent California Colleges and Universities (AICCU).

Additionally, 3,768 faculty were not tenured, but were on the tenure track. Sixty-three percent were males and 36.7 percent were females. Ethnic minorities together constituted 16.9 percent. Again, Asians (7.9%) were better represented than Hispanics (4.8%), Blacks (3.8%), and American Indians (0.4%).

In 1985, there were 43,671 "other faculty" in California's public postsecondary institutions. These faculty generally hold temporary appointments, typically for a single term or academic year and they are not eligible for tenure. There are more "other" faculty than tenure-track faculty. Display 7 also demonstrates that there are a higher proportion of women in this category than in tenure or tenure-track categories. Roughly 41 percent of women faculty held nontenure-track posts compared to only 25.3 percent of the total number of full-time tenured positions.

Display 7: Number and Percent, Males and Females and Ethnic Groups by Tenure Status in California's Public Postsecondary Institutions, Fall 1985

	Tenure-Track			
	Tenured	NonTenured	Other*	Total Faculty
Total	30,285	3,765	43,655	77,725**
	(100%)	(100%)	(100%)	(100%)
Gender				
Male	22,623	2,382	25,877	50,882
	(74.7)	(63.2)	(59.3)	(65.5)
Female	7,662	1,383	17,778	26,833
	(25.3)	(36.7)	(40.7)	(34.5)
Ethnic Group				
White	26,229	3,076	36,486	65,791
	(86.6)	(81.6)	(83.5)	(84.6)
Asian/Pacific Islander	1,433	298	2,532	4,263
	(4.7)	(7.9)	(5.8)	(5.5)
Hispanics	1,306	182	2,054	3,542
	(4.3)	(4.8)	(4.7)	(4.5)
Blacks	1,136	145	1,440	2,721
	(3.7)	(3.8)	(3.3)	(3.5)
American Indian	147	16	232	395
	(0.5)	(0.4)	(0.5)	(0.5)

Notes: *Part-time faculty represent 82.4 percent (35,956) of Other Faculty.

**Total includes 55 cases that did not respond to ethnic classification, 10 cases that did not respond to gender classification, and 958 cases who are nonresident faculty and were not included in any ethnic group.

Source: California Postsecondary Education Commission, Faculty and Staff Report, Fall 1985.

Of the 12,721 full-time faculty at the University of California in the fall of 1985, 47.4 percent were tenured, and in all categories were predominately white and male. Women represented 10.7 percent of the tenured faculty, 29.7 percent of the nontenured faculty, and 33.4 percent of "other" faculty. Total minority group representation in the University was 12.4 percent. Among ethnic minority groups, Asians were the most represented in the tenure status categories, followed by Hispanics, Blacks, and American Indians (Display 8).

Of the 11,725 full-time faculty at the State University in fall 1985, 75.3 percent were tenured. Again, they were also predominately white and male. Women held 19.3 percent of the tenured positions, 33.5 percent of the nontenured positions, and 42.2 percent of the "other" faculty positions. All minority groups comprised a total of 14.4 percent of all faculty. As with women, minority groups are more represented in the nontenured and "other" faculty positions. At UC, among ethnic minority groups Asians were the most represented in all the tenure status categories, followed by Hispanics, Blacks, and American Indians (Display 8).

Of the 16,785 full-time faculty at the Community Colleges in 1985, 89.1 percent were tenured. Women held 34.9 percent of the tenured positions, 48.8 percent of the nontenured, and 42.9 percent of the "other" faculty positions. Minority groups combined represented 14.1 percent of all faculty. Hispanics held 5.8 percent of the tenured positions while Blacks held 5.3 percent, Asians 3.6 percent, and American Indians 0.6 percent.

Display 8: **Number and Percent, Males and Females, and Ethnic Groups by Tenure Status in the University of California, the State University, and the Community Colleges, Fall 1985**

University of California

	Tenured	NonTenured	Other*	Total Faculty
Total	6,224 (100)	1,172 (100)	9,635 (100)	17,031** (100)
Gender				
Male	5,556 (89.2)	820 (69.9)	6,399 (66.4)	12,775 (75.0)
Female	668 (10.7)	349 (29.7)	3,222 (33.4)	4,239 (24.8)
Ethnic Group				
White	5,566 (89.4)	946 (80.7)	7,343 (76.2)	13,855 (81.3)
Asian/Pacific Island	343 (5.4)	87 (7.3)	858 (8.8)	1,288 (7.4)
Hispanic	157 (2.5)	53 (4.5)	301 (3.1)	511 (3.0)
Blacks	106 (1.7)	32 (2.7)	182 (1.8)	320 (1.8)
American Indians	17 (0.2)	3 (0.2)	26 (0.2)	46 (0.2)

* Part-time lecturers represent 42.4 percent of Other Faculty.
**Total includes cases that did not respond to gender and ethnic classifications.

State University

	Tenured	NonTenured	Other*	Total Faculty
Total	9,102 (100)	1,530 (100)	8,503 (100)	19,135 (100)
Gender				
Male	7,340 (80.6)	1,017 (66.4)	4,907 (57.7)	13,264 (69.3)
Female	1,762 (19.3)	513 (33.5)	3,596 (42.2)	5,871 (30.6)
Ethnic Group				
White	8,024 (88.1)	1,250 (81.6)	7,084 (83.3)	16,358 (85.4)
Asian/Pacific Island	540 (5.8)	160 (10.3)	671 (7.8)	1,371 (7.1)
Hispanic	275 (3.0)	72 (4.7)	423 (4.9)	770 (4.0)
Blacks	223 (2.4)	41 (2.6)	274 (3.2)	538 (2.8)
American Indians	40 (0.4)	7 (0.4)	51 (0.5)	98 (0.5)

* Part-time lecturers represent 83.7 percent of Other Faculty.

	Community Colleges			
	Tenured	NonTenured	Other*	Total Faculty
Total	14,960	1,066	25,533	41,559
	(100)	(100)	(100)	(100)
Gender				
Male	9,727	545	14,571	24,843
	(65.0)	(51.1)	(57.0)	(59.7)
Female	5,232	521	10,960	16,713
	(34.9)	(48.8)	(42.9)	(40.2)
Ethnic Group				
White	12,639	880	22,059	35,578
	(84.4)	(82.5)	(86.3)	(85.6)
Asian/Pacific Islander	550	51	1,003	1,604
	(3.6)	(4.7)	(3.8)	(3.7)
Hispanic	874	57	1,330	2,261
	(5.8)	(5.3)	(5.2)	(5.4)
Blacks	807	72	984	1,863
	(5.3)	(6.7)	(3.8)	(4.4)
American Indians	90	6	93	251
	(0.6)	(0.5)	(0.3)	(0.6)

* Part-time instructors represent 97 percent of Other Faculty.

Percentage of Doctorates and Training

In 1960, when the Master Plan was written, 70 percent of the faculty in the University, 40 percent in the State University, 9 percent in the Community Colleges, and 58 percent in the independent colleges held doctorates (Coordinating Council for Higher Education, 1965, pp.13-14). Today the doctorate is considered the necessary academic degree for teaching, particularly at the upper division and graduate level and research.* By 1981, 84.8 percent of assistant professors, 90 percent of associate, and 90 percent of full professors in the University held doctorates. As of 1984, 47.6 percent of CSU's assistant professors held doctorates, as did 68.0 percent of the associate professors and 82.4 percent of the full professors. The estimated percentage of doctorates for full-time faculty in the independent California colleges and universities in 1985 was 73 percent. By contrast, 1983 data show the percentage of doctorates for full-time faculty in the California Community Colleges at 13 percent.

Display 9 illustrates the top 25 institutions from which the highest level of education was attained by new faculty in the University of California and by all current faculty in the State University. The number of faculty members hired by the University between 1981-82 and 1984-85 shows that most received their training and degrees from institutions outside the state. In contrast, most current CSU faculty members received their degrees from California institutions. While strictly comparable numbers were not available, data show that the University of California at Berkeley, Los Angeles, and Davis, as well as Stanford University have produced many of the faculty in both systems.

*In some disciplines, such as studio art, the Master of Fine Arts is the common terminal degree.

Display 9: Top 25 Institutions at which Highest Level of Education was Attained

UC
New Appointees
from 1981-82 to 1984-85

Institution	Number of Faculty
University of California, Berkeley	78
Harvard	40
Stanford	40
Cornell	33
University of California, Davis	32
University of California, Los Angeles	29
Massachusetts Institute of Technology	27
University of Chicago	26
Yale	26
Princeton	23
University of Wisconsin, Madison	19
University of Michigan	17
California Institute of Technology	17
University of Minnesota	16
Columbia	15
University of California, San Diego	15
University of Pennsylvania	12
University of Washington	12
John Hopkins University	10
Ohio State University	10
University of London	9
Cambridge University	8
Oxford	8
Oregon State University	8
Northwestern University	8

Source: University of California, "Headcount of New Appointees at which Highest Level of Education was Attained, 1981-82 to 1984-85."

CSU
Current Faculty, 1985

Institution	Number of Faculty
University of California, Los Angeles	947
University of Southern California	811
University of California, Berkeley	798
Stanford University	509
University of Washington	277
University of Oregon	212
University of California, Davis	195
University of Wisconsin, Madison	179
Michigan State University	170
Claremont Graduate School	166
University of Illinois, Urbana	156
University of Iowa	151
Ohio State University	147
Indiana University, Bloomington	139
University of Chicago	138
Northwestern	126
University of Michigan, Ann Arbor	125
Columbia	123
University of California, Santa Barbara	123
University of Minnesota	119
Oregon State University	116
University of Arizona	114
Arizona State University	108
Iowa State University	105
Harvard	102

Source: California State University, Office of the Chancellor.

Distribution of Faculty by Discipline

Role, mission, and student clientele differ among the public institutions, and the type of course offerings reflect some of those differences. Display 10 compares the academic disciplines taught by the tenure/probationary and other (nonladder rank) faculties at the University, the State University, and the Community Colleges. At the University, the five academic disciplines with the highest percentage of tenured and probationary faculty in 1985 were health science, social science, physical science, letters, and engineering. Nonladder rank faculty, of whom 42.4 percent were part-time lecturers, were greater represented in the health science, physical science, letters, life science, and agriculture science disciplines. At the State University, the five disciplines with the highest percentage of tenured and probationary faculty were liberal/general studies, business/management, physical science, life science, and education. Nonladder rank faculty, of whom 83.7 percent were part-time lecturers, were similarly concentrated in liberal/general studies, business/management, and physical science. In addition, engineering and math had high percentages of nonladder rank faculty in the State University. At the Community Colleges, the highest percentage of tenured and probationary faculty taught courses in letters, arts, social science, leisure, and basic skills. Nonladder rank faculty, of whom 97 percent were part-time instructors, were greater concentrated in basic skills, arts, business/ office, letters, and leisure disciplines.

The primary reason that health science faculty at the University of California rank first in both numbers and in percentages of total faculty is attributed to a substantially lower student-faculty ratio in professional school health science programs. For example, the student-faculty ratio in medical schools is 3.5:1, while in dentistry and veterinary medicine the ratios are 4:1 and 5.4:1 respectively. In comparison, the average student-faculty ratio for the four-year public institutions is 17.6 full-time-equivalent students to 1 full-time-equivalent faculty.

Age of Faculty

During the 1960s and early 1970s, graduate schools produced large numbers of doctorates to fill faculty positions as colleges and universities stepped up faculty recruitment to meet increases in student enrollment. The rate of new hires slowed in the 1980s, and todays tenured faculty, as a group, are older and nearing retirement age. In California's public postsecondary institutions, 50 percent or more of the faculty are over 46 years of age; in fact, most faculty members are between 46 and 56 years of age. At both the University and the State University, the average age of the faculty is roughly 50.5, while in the Community Colleges the average is 48. This pattern follows a national trend; in 1984, over 50 percent of the faculty nationwide were 40 years or older and almost one-fourth of all faculty members were in the 50-59 age category (Carnegie Survey of Faculty, 1985).

Display 10: Number and Percent of Faculty in Academic Disciplines, Fall 1985.

Tenured and Probationary			Other (Non-Ladder Rank)		
	Number	Percent		Number	Percent
University of California					
Health Science	1,622*	21.9	Health Science	3,464*	35.9
Social Science	964	13.0	Physical Science	1,014	10.5
Physical Science	738	10.0	Letters	518	5.3
Letters	581	7.8	Life Science	507	5.2
Engineering	529	7.1	Agriculture Science	444	4.6
Life Science	476	6.4	Social Science	373	3.8
Agriculture Science	476	6.4	Engineer	315	3.2
Arts	360	4.7	Arts	254	2.6
Foreign Language	344	4.6	Foreign Language	167	1.7
Math	293	3.9	Education	165	1.7
Education	226	3.1	Interdiscipline	155	1.6
Business/Management	184	2.5	Math	125	1.2
Psychology	181	2.4	Business/Management	113	1.1
Law	126	1.7	Architecture	74	0.7
Architecture	87	1.2	Psychology	69	0.7
Computer/Information	60	0.8	Computer/Information	38	0.3
Interdiscipline	57	0.8	Law	34	0.3
Home Economics	40	0.5	Library Science	30	0.3
Library Science	19	0.3	Area Study	23	0.2
Area Study	9	0.1	Home Economics	19	0.1
Communication	8	0.1	Communication	4	0.0
* Note: Of the total tenured and probationary faculty in the health sciences, 1,155 members teach in the schools of medicine.			* Note: Of the total non-ladder rank faculty in the health sciences, 2,287 are assigned to the schools of medicine.		
California State University					
Liberal/General Studies	1,372	12.9	Liberal/General Studies	1,087	12.7
Business/Management	1,000	9.4	Business/Management	791	9.3
Physical Science	801	7.5	Physical Science	572	6.7
Life Science	729	6.9	Engineering	540	6.3
Education	670	6.3	Math	479	5.6
Social Science	666	6.3	Education	476	5.5
Math	534	4.9	Arts	470	5.5
Arts	523	4.9	Communication	437	5.1
Psychology	505	4.7	Health Science	418	4.9
Engineering	401	3.8	Life Science	385	4.5
Health Science	373	3.5	Computer/Information	284	3.3
Communication	338	3.2	Foreign Language	251	2.9
Foreign Language	297	2.8	Social Science	242	2.8
Health Related	284	2.7	Psychology	233	2.7
Computer/Information	214	2.0	Consumer	229	2.6
Philosophy/Religion	195	1.8	Health Related	203	2.3
Consumer	189	1.8	Area Study	144	1.6
Business/Office	149	1.4	Industrial Art	136	1.5
Area Study	140	1.3	Philosophy/Religion	121	1.4
Home Economics	128	1.2	Business/Office	112	1.3
Marketing	127	1.2	Home Economics	112	1.3
Industrial Art	119	1.1	Marketing	87	1.0
California Community Colleges					
Letters	1,315	8.2	Basic Skills	2,474	9.6
Arts	1,167	7.3	Arts.	2,214	8.6
Social Science	1,042	6.5	Business/Office	2,030	7.9
Leisure	930	5.8	Letters	1,582	6.1
Basic Skills	833	5.2	Leisure	1,364	5.3
Business/Office	793	4.9	Business/Management	1,304	5.1
Math	732	4.6	Math	1,204	4.7
Physical Science	682	4.3	Protect Service	1,058	4.1
Health Science	593	3.7	Computer/Information	1,026	4.0
Life Science	543	3.4	Vocational Home Economics	1,003	3.9
Mechanical Repairs	470	2.9	Foreign Language	893	3.4
Psychology	410	2.6	Social Science	820	3.2
Allied Health	401	2.5	Mechanical Repairs	743	2.9
Engineer Tech.	356	2.2	Engineer Tech.	694	2.7
Foreign Language	343	2.1	Precision Production	660	2.5
Business/Management	331	2.1	Allied Health	593	2.3
Vocational Home Economics	329	2.0	Education	439	1.7
Precision Production	325	2.0	Psychology	403	1.5
Computer/Information	323	2.0	Physical Science	383	1.5
Protect Services	164	1.0	Marketing	373	1.4
Philosophy/Religion	141	0.9	Life Science	309	1.2
Education	105	0.6	Health Science	277	1.0
Marketing	70	0.4	Philosophy/Religion	155	0.6

Compensation for Faculty

Faculty may also be described on the basis of average salaries, salary schedules, and the percentage of males, females, and minority group members in salary ranges.

Display 11 shows the average salaries for faculty at the University, the State University, and the Community Colleges, differentiated according to rank. Because of differences in salary schedules and the number of faculty per rank, each system has a different average. For 1985-86, the all ranks average faculty salary for the University was $51,188, for the State University $40,935, and for the Community Colleges $36,203.

Both the University and the State University compare their respective average salaries with comparison institutions for the purpose of achieving and maintaining parity. Parity is defined as the mean of all salaries paid by the comparison institutions as a whole at each rank. In order to make comparisons to similar type institutions each system uses a different set of comparison institutions. In the Community Colleges, faculty salaries are set by district boards according to schedules that take into account formal education and years of service. While the Community Colleges do not operate on a statewide salary schedule, it is still possible to arrive at a statewide average salary for faculty by averaging the ten highest and the ten lowest paying districts.

Display 11: Average Salaries of Full-Time, Tenure-Track Faculty by Academic Rank at UC, CSU, and CCC, 1985-86

Academic Rank	UC	CSU	CCC
Professor	$58,576	$45,820	
Associate Professor	38,871	35,383	
Assistant Professor	34,188	28,558	
Instructor	-	24,955	
All Ranks Average	$51,188	$40,935	$36,203

Source: California Postsecondary Education Commission, Faculty and Staff Report, Fall 1985, and "Faculty Salaries in California's Public Universities, 1986-87."

Display 12 shows the faculty salary schedules for the State University and the University of California by rank, step, and employment period. The salary schedules differ somewhat in the number of steps per rank but the principal difference is the higher salary scale for faculty in the University. For example, a professor in step 1 at the State University earns $38,448 for 9-months or $44,268 for 12-months employment, while at the University a professor in step 1 earns $42,200 or $49,200 respectively.

Display 12: Faculty Salary Schedule for California State University and University of California

Rank/Step		State University 9-Months	State University 12-Months	University of California 9-Months	University of California 12-Months
Assistant	1	18,684	21,192	-	-
	2	19,476	22,116	-	-
	3	20,316	23,100	-	-
Instructor	1	22,116	25,308	25,200	29,200
	2	23,100	26,496	-	-
	3	24,168	27,756	-	-
	4	25,308	29,064	-	-
	5	26,496	30,432	-	-
Assistant Professor	1	24,168	27,756	29,800	34,600
	2	25,308	29,064	30,900	35,800
	3	26,496	30,432	32,100	37,200
	4	27,756	31,884	33,500	38,900
	5	29,064	33,408	35,100	40,700
	6	-	-	37,200	43,200
Associate Professor	1	30,432	35,004	35,200	40,800
	2	31,884	36,672	37,300	43,300
	3	33,408	38,448	39,200	45,500
	4	35,004	40,284	42,300	49,100
	5	36,672	42,228	46,600	54,100
Professor	1	38,448	44,268	42,200	49,200
	2	40,228	46,392	46,700	54,200
	3	42,228	48,648	51,300	59,500
	4	44,268	51,000	56,100	65,100
	5	46,392	53,472	61,000	70,800
	6	-	-	66,000	76,600
	7	-	-	71,200	82,600

Sources: California State University, Instructional Faculty Salary Schedule, 1986; University of California, Faculty-Ladder Ranks-Salary Scales, 1986.

In addition, the University has a specialized salary schedule for hiring and retaining professors in highly competitive fields. Display 13 shows the specialized salary schedules for the fields of business management, engineering, preclinical, veterinary medicine, and law.

Display 14 shows the average salary for the University's full-time clinical faculty in its medical schools. The California State University is working out an agreement with its faculty union to develop a separate salary schedule for competitive fields but the specific disciplines have not yet been determined.

Display 13: Specialized Salary Scales, University of California

Rank/Step		Business Administration/ Management & Engineering 9 months	Business Administration/ Management & Engineering 12 months	Preclinical 12 months	Dental 12 months	Veterinary Medicine 12 months	Law School 12 months
Instructor		-	-	38,100	-	38,100	-
Assistant	1	38,000	45,000	43,000	50,600	43,000	-
	2	40,700	47,200	45,600	53,300	45,600	-
	3	42,800	49,600	47,300	55,400	47,300	-
	4	44,800	52,000	48,800	57,700	48,800	-
	5	-	-	51,000	60,600	51,000	-
	6	-	-	54,400	63,900	54,400	-
Associate Professor	1	46,400	53,800	51,100	60,200	51,100	-
	2	48,500	56,300	54,500	64,000	54,500	-
	3	50,300	58,300	56,400	66,600	56,400	-
	4	-	-	61,200	71,200	61,200	-
	5	-	-	65,000	76,100	65,000	-
Professor	1	52,200	60,600	61,300	71,300	61,300	53,700
	2	55,200	64,000	65,100	76,200	65,100	57,300
	3	58,900	68,300	68,700	81,600	68,700	64,300
	4	63,400	73,500	73,600	86,900	73,600	70,000
	5	68,500	79,500	79,500	92,900	79,500	75,700
	6	73,400	85,100	83,200	96,800	83,200	81,200
	7	78,400	90,900	90,100	104,700	90,100	88,200

Source: University of California Faculty-Ladder Ranks - Specialized Salary Scales, 1985.

Display 14: University of California Medical School Faculty Salaries, 1984-85

	Professor	Associate Professor	Assistant Professor
Pediatrics	$93,863	$70,285	$55,273
Surgery	155,907	108,202	86,715
General Medicine	102,887	76,637	61,887

Source: California Postsecondary Education Commission, "Faculty Salaries in California's Public universities, 1986-87," pp.19-20.

Display 15 shows 1983 data (most recent) of the relative distribution of white men, white women, minority men, and minority women within faculty (full-time, 9-month) salary ranges in the University, the State University, and Community Colleges. At the University, white men had the lowest percentage -- 29.3 percent -- employed at under $30,000, while minority women had the highest -- 83.6 percent. Among white men, 12.9 percent earned $50,000 or more while only 7.6 percent minority men did so. In contrast, only one percent minority women received $50,000 or more, as did only 1.6 percent of the white women.

In the State University, 31.9 percent of white men earned less than $30,000 compared to 66.2 percent of minority women. Over 52 percent of white men earned salaries in the $35,000 - $39,000 range, as did only 16.6 percent of the minority women. A greater proportion of men, both white and minority, received salaries in the $35,000 - $39,999 range than did women.

Three-quarters of the nine-month faculty in Community Colleges received salaries of $30,000 or more in fall 1983 -- a greater percentage than in either the University or the State University. This was the case regardless of gender or ethnicity. Women, regardless of their ethnicity, however, were more likely to receive salaries of less than $30,000 than were men. As in the other two systems, the greatest disparity in the less-then-$30,000 category was between white men at 18.4 percent and minority women at 37.4 percent. Each of the gender and ethnic groups were concentrated most heavily in the $30,000 - $34,999 range, with only white women having less than 40 percent of their number here. Both white and minority men had greater percentages of their number in the $35,000 - $39,999 range than did either white or minority women. In the highest salary ranges of $40,000 and above, 76.5 percent of the faculty were white men.

Display 15: Percentage Distribution of Faculty Salary Ranges by Gender and Ethnicity, 1983.

	Less $30,000	30-34,999	35-39,999	40-44,999	45-49,999	50,000 and above
University of California						
(N=5,661)	37.9	17.0	10.2	16.8	7.5	10.4
White Males (N=4,159)	29.3	17.5	11.5	19.9	8.9	12.9
White Females (N=863)	70.7	14.8	5.1	5.2	2.5	1.6
Minority Males (N=511)	41.5	18.2	11.0	15.5	6.3	7.6
Minority Females (N=128)	83.6	11.7	1.6	1.6	0.8	0.8
California State University						
(N=10,990)	39.0	18.1	44.8	-	-	-
White Males (N=7,444)	31.8	15.8	52.4	-	-	-
White Females (N=2,161)	57.1	16.1	28.6	-	-	-
Minority Males (N=1,093)	44.5	19.3	36.3	-	-	-
Minority Females (N=290)	66.2	17.2	16.6	-	-	-
California Community Colleges						
(N=13,739)	25.0	39.8	32.5	2.5	0.2	0.1
White Males (N=8,106)	18.4	41.2	36.9	3.1	0.3	0.1
White Females (N=3,768)	35.8	36.0	26.5	1.6	0.1	-
Minority Males (N=1,930)	28.1	42.3	28.3	1.2	0.1	-
Minority Females (N=772)	37.4	42.2	19.3	1.0	-	-

Faculty Supply and Demand

Faculty supply and demand are inextricably tied to postsecondary institutions' present and future efforts to offer quality educational programs. Supply is determined by the annual production of doctorates by the nation's doctoral degree-granting institutions; demand is determined by vacancies created by resignations and retirement, new openings created by increases in student enrollment or expanded programs, and the faculty-student ratios maintained by various institutions. Both the University of California and the State University are currently conducting supply and demand studies to determine the number of new faculty that will be needed by the year 2000, and these predictions have serious implications for long range planning.

A National Profile

Faculty supply and demand in California are closely related to faculty supply and demand nationally. California produces many doctorates who are hired by colleges and universities in other states, and California's postsecondary institutions recruit many of their faculty from outside the state. National data thus provide a useful general picture of issues related to faculty supply and demand for California.

The authors of a recent study estimate that as many as 400,000 to 500,000 new faculty appointments will be needed nationally over the next twenty-five years (Bowen and Schuster, 1985). However, according to the National Research Council (1985), the number of doctorates awarded each year since 1977 has remained relatively constant but has varied significantly by discipline. The national production of doctorates in the social sciences, psychology, arts and humanities, and education has been greater than the number of job openings. By contrast, in the physical sciences, and especially in engineering, there have been more faculty openings than new doctorates. This pattern is also found in California where engineering, physical sciences, and business and management are high demand areas in contrast to the arts, humanities, and social sciences.

Differing patterns of supply and demand have resulted in varying job opportunities for those with a doctorate. According to the National Research Council survey, many Ph.D.s in the humanities are working part-time or outside the fields of their degrees because of the lack of suitable employment opportunities. Most humanities Ph.D.s (83%) who are working, are employed by educational institutions where they are engaged primarily in teaching. The percentage of humanists in educational institutions, however, reflects a decline since 1977.

In contrast, the distribution of science and engineering Ph.D.s gives an indication of how specialized training is being utilized in the labor market. Approximately 52 percent of the employed Ph.D.s in science and engineering were employed by education institutions. Roughly 32 percent were employed by business and industry, representing an increase since 1977. Approximately 33 percent of the employed science and engineering Ph.D.s were engaged in research, development, or design work, while 30 percent were primarily engaged in teaching.

There are, of course, other factors that affect demand. These include the kinds of educational programs offered, the extent of graduate programs, and the type of degrees established as terminal degrees.

In terms of gender, the summary shows that of 387,300 scientists/ engineers, 86.4 percent are male and 13.6 percent are female. In terms of ethnic group representation, 87.9 percent of the scientists/engineers are white, 7.9 percent are Asian, 1.4 percent are Hispanic, 1.3 percent are Black, and 0.1 percent are American Indian.

Of the 85,200 Ph.D.s in the humanities, 71.5 percent are male and 28.5 percent are female. In terms of ethnic group representation, 91.5 percent are white, 2.9 percent are Hispanic, 1.6 percent are Black, 1.6 percent are Asian, and one tenth of one percent are American Indians.

Summary

The most important points in this review of faculty and staff data may be summarized as follows:

First, among the total number of faculty in the public postsecondary institutions, the greater number are those who hold temporary appointments ("other" nonladder rank). This reflects the fact that a greater number and proportion of the part-time and temporary faculty are found in the Community Colleges.

Second, the percentage of women represented on administrative staffs has increased in all three public postsecondary systems. Ethnic minorities have also made modest gains. In 1985, however, all Blacks, Hispanics, Asians, and American Indians combined represented less than 19 percent of all administrators in the public postsecondary institutions.

Third, compared to the modest increases of women and minorities in administrative staffs, there were only slight improvements in their percentages among the faculty. Women faculty continued to be better represented among those with temporary appointments than in tenured or tenure-track appointments. White males predominate in tenured and probationary positions in all three public postsecondary systems. The disproportionately low representation of Blacks and Hispanics on faculties is of special concern when we consider that the number enrolling in and graduating from graduate schools is now declining.

Finally, today's faculties and administrators consist largely of people who were recruited in the 1950s and 1960s. California will need many faculty replacements, even in the years immediately ahead. Beginning in 1995 and continuing into the twenty-first century, a vast number of faculty replacements will be needed. Increasingly, many postsecondary institutions will be in competition with the private sector and government for highly able individuals. The question that needs to be examined is, will California be in a position to recruit excellent faculty and administrators during the next decade-and-a-half when the replacement of the vast majority of the present generation of faculty must occur?

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BACKGROUND PAPER NO. 8:*

VOCATIONAL EDUCATION AND EMPLOYMENT TRAINING IN CALIFORNIA

Introduction

In recent years, the California Legislature's interest in vocational education has been in ample evidence. Numerous bills have been introduced by members of both houses, Republicans and Democrats alike, calling for studies or reorganizations of the system. For example, AB 1073 (Campbell) stated, "California's present employment preparation and career education programs do not form a cohesive system to meet employer's needs for a skilled work force and employee demands for career education and training. There is inadequate coordination among the many service providers funded by State and federal funds that results in unnecessary duplication among them." SB 1570 (Nielsen) called for the review of the Master Plan for Higher Education to include "Articulation: transition from secondary education to postsecondary education and employment," and "the appropriateness of existing educational delivery systems and their ability to serve present and future populations."

This paper reviews the organization and delivery of vocational education in California, with special emphasis on postsecondary programs. The study includes:

- Review and analysis of the missions of the existing program providers and the identification of their service populations.
- Review and analysis of the current role of the private sector in vocational education.
- Review and evaluation of the current administrative system for the planning and coordination of vocational education.

The following sectors are included in the analysis:

- Community Colleges
- Regional Occupational Centers/Programs
- Adult Schools
- Secondary Schools
- Proprietary Schools
- Federal Programs (i.e., JTPA)
- State Programs (i.e., GAIN).

*Prepared by Dr. William E. Piland

Definition of Terms

Vocational education is an area often confused by terminology and definitions. The terms career education, occupational education, job training, and employment preparation are frequently used interchangeably with vocational education. Federal law defines vocational education as "organized educational programs which are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career requiring other than a baccalaureate or advanced degree (P.L. 94-482, Sec. 195)."

For purposes of this paper, vocational education is considered "education designed to instill self-sufficiency in students through a teaching of generalized skills," as compared with employment preparation, which involves the teaching of specific skills necessary for particular jobs. The definition and distinction were coined by the Assembly Committee on Economic Development and New Technology and accurately reflect vocational education's long-range nature and its effect not only on the attainment of entry-level employment but also on occupational advancement, skills improvement, and career change. By contrast, employment training is short-term, intensive, and job specific.

The National Scene

At the national level, vocational education began with the passage of the Smith-Hughes Act in 1917. Since then, there have been numerous laws affecting vocational education (see Chart 1 in the appendix). Most recently, the 1984 Carl Perkins Act, emphasized serving special needs populations and program improvement and evaluation.

In the intervening years, federal legislation has led to a number of changes in vocational education. These include the separation of vocational from general education; the creation of different administrative structures and supporting systems for vocational and general education; and the establishment of different bases for justifying offerings of general education and vocational education.

This federal legislation has strengthened vocational education through the years. But, at the same time, it has created problems for the organization, administration, and delivery of vocational education throughout the country.

Even though vocational education is national in scope and reflects national purposes, the enterprise is not a single system. It is a collection of different state systems and is characterized by diversity.

There are seven occupational fields within vocational programs -- agriculture, distribution, health, occupational home economics, business and office, technical, and trade and industry. (One additional nonoccupational field, consumer and homemaking education, is included as a vocational program.) In recent years, federal, state, and local governments have spent over $7 billion annually on vocational education. More than 17 million students were enrolled in federally funded courses and programs of study in 1980.

About three-fifths of all enrolled students are in high school programs with the remainder in postsecondary and adult programs. Programs are offered in a variety of settings, including comprehensive high schools, 2- and 4-year postsecondary institutions, area vocational centers, and specialized vocational schools and technical institutes. There are over 20,000 public educational institutions offering vocational programs.

A recent study of various state efforts found problems throughout the country. Some of the study's findings were:

- A state planning body is necessary, but it alone cannot guarantee coordinated and comprehensive planning.
- Occupational demand data are readily available, but are of questionable utility for local program decisions.
- State plan documentation, though improved, still consists primarily of compliance documents and does not reflect the operational planning that many states in fact perform.
- State plans do not significantly influence local program decisions.

Significantly, the study concluded that "the findings permit no verdict of either success or failure to be pronounced on the means adopted to achieve the ambitious goals of federal policy as a whole. Some have worked more successfully than others, none has worked as effectively as have (sic) been expected, none has been a complete failure, and a few have had unexpected and unintended results" (David, 1981).

Therefore, while vocational education has progressed, developed, and grown at the national level, serious problems exist in planning and coordination. Not surprisingly, similar problems exist at the state level.

VOCATIONAL EDUCATION: THE CALIFORNIA SITUATION

In California, vocational education is delivered through comprehensive high schools, regional occupational centers and programs (ROCPs) and adult schools under the supervision of the State Department of Education. Vocational education is also offered through the Community Colleges and by private postsecondary vocational schools, also known as "proprietary" schools. These proprietary schools operate under rules and regulations administered by the Private Postsecondary Education Division of the State Department of Education. To varying degrees, vocational education is provided by others including the Department of Corrections, the Division of Apprenticeship Standards, and the California State University. Many of these providers are also major deliverers of employment preparation programs and services.

Secondary Schools

Mission:

Vocational education in comprehensive secondary schools is asserted to be "a continuum of well-planned, coordinated, articulated and sequential education and training experiences that prepare students for successful participation in the community, home, life, work, and college." (Superintendent's Vocational-Technical Management Advisory Committee Report, 1986). Vocational education is intended to reinforce basic skills and enrich academic education while preparing students for identified occupations, advanced training, and/or retraining. Specifically, secondary vocational education emcompasses the areas of:

- Personal attitudes and life management skills.
- Communication, mathematics, critical-thinking, and other basic academic skills.
- Employability skills, including interpersonal relationships; good work attitudes, such as punctuality, sense of responsibility, self-discipline, and pride; the ability to communicate; and the ability to change.
- General and specific occupational skills and knowledge.
- Career planning and life-long learning.

Enrollments:

Tables 1-1 through 1-5 in the appendix show some interesting trends, including:

- Between 1981-84, total secondary school enrollments increased by almost 29,000 students, or 2 percent, with most of the growth occurring in the 9th and 10th grades. Steady growth has also occurred especially in grades K-3. This suggests that secondary school enrollment will dip in the near future for a few years, and then begin a yearly increase (Table 1-1).

- While whites and American Indians and Alaskan Natives are underrepresented in public school enrollments compared to their percentage of the State's overall population, all other groups are overrepresented. This bears out the often-discussed change in the makeup of California's population (i.e., the younger people are less white and more ethnic). Since 1981, enrollment of Hispanics and Asians has increased by the largest percentage while enrollment for whites has decreased by the largest percentage (Table 2-2).

- About 41 percent of all students enrolled in secondary schools (excluding ROC/P enrollments) are taking some vocational education course. However, compared to the total secondary enrollments, Blacks, Filipinos, and Asians (including Pacific Islanders) are underrepresented in vocational education while other groups are somewhat overrepresented. In other words, high school vocational education programs do not appear to be attracting the kinds of students who will become the majority of the workforce candidates in the not-too-distant future (Table 1-3).

- There are more boys (54%) than girls (46%) enrolled in secondary schools (Table 1-4).

- Between 1981 and 1984, enrollment in secondary school vocational education programs decreased by 20 percent -- by over 222,000 students (Table 1-5). This decrease is an interesting comparison with the 2 percent increase in student popualtion overall during the same years.

- Thirty-five percent of the vocational education enrollments are in Office Education, 28 percent are in Industrial Arts Education, and 17 percent are in the nonoccupational Consumer and Homemaking Education field. These three program areas have had the largest share of enrollments since 1981, though Office Education is the only program to have increased in enrollment since that year (Table 1-5).

Vocational education in comprehensive secondary schools is experiencing major problems in most states. In California, "at present, enrollment in vocational education courses and programs are (sic) declining and funds for these programs are shrinking. The recent move to more rigor in the curriculum, higher test scores, and more classroom instructional time are (sic) being blamed for increasing the dropout rate and for not meeting the needs of all students" (Superintendent's Vocational-Technical Management Advisory Committee Report, 1986). Other factors which have had a negative impact on vocational education include outdated and inadequate physical facilities, obsolete equipment, inadequately prepared instructors, the high costs associated with modern vocational programs, and a changing job market with fewer opportunities for 18 and 19 year old high school graduates. The short-range outlook for vocational education in the comprehensive secondary school appears to be one of continued deemphasis and decline.

Regional Occupational Centers/Programs (ROCPs)

Mission:

In addition to secondary school programs, California has a system of regional occupational centers and programs which provide vocational education at the secondary level.

ROCPs are established and maintained by county superintendents of schools, governing boards of school districts maintaining high schools, or school district governing boards in cooperation with Community Colleges. A regional occupational program is defined as "a vocational or technical training program which meets the criteria and standards of instructional programs in regional occupational centers and which is conducted in a variety of physical facilities which are not necessarily situated in one single plant or site" (Education Code - 52303).

Presently there are 67 ROCPs in California. The purpose of ROCPs, which serve secondary school students (9th - 12th grades) and adults (18 years old and older) is to:

- Provide individual counseling and guidance on vocational matters.
- Provide skill training in occupational fields having current and future needs for such training.
- Provide an opportunity for students to acquire entry level vocational skills that may lead to a combination work-study schedule.
- Provide for the upgrading of vocational skills and for retraining when necessary.
- Maintain a pupil-teacher ratio which will enable students to achieve optimum benefits from the instructional program (Education Code 52302).

Enrollments:

As shown in Appendix Table 1-4, 125,225 enrollees, or 12 percent of all secondary vocational education enrollees, were in ROCPs. Most of these students (76%) were in the 11th or 12th grades and a slight majority (51%) were males. Appendix Table 1-5 shows that enrollment in ROCPs increased from about 92,000 in 1981 to over 125,000 in 1984, an increase of 36 percent. The program areas of Trade and Industrial (42% of enrollees) and Office Education (27% of enrollees) account for over 2/3 of all enrollments.

Enrollment in ROCPs, then, is increasing steadily and substantially as compared to enrollments in comprehensive high school vocational education programs. Overall however, few secondary students attend ROCPs and those who do are concentrated in Office Education and Trade and Industrial.

Although secondary education enrollments in ROCPs continue to grow, concerns remain. First, some fear that the academic reform movement may diminish the role of vocational education and restrict the amount of time available in a

student's schedule to pursue vocational education courses. Second, there are a number of pervasive factors that seem to discourage students from enrolling in ROCPs. A report entitled "Training Tomorrow's Workers," issued in 1983 by the California Assembly Office of Research, listed reasons why few students enrolled in ROCPs. These include: institutional rivalry, whereby feeder schools resist sending students to shared-time vocational programs; competition for students; distance to the programs; lack of transportation; the time it takes to get to the program and participate in the longer ROCP classes; and failure of students to know about and take vocational courses.

The report did highlight some of the strengths of ROCP programs. It concluded that compared to secondary school vocational education programs, ROCPs were: (1) tied more closely to labor market needs, (2) able to change more rapidly to meet new needs, (3) able to maintain closer ties to business and industry, (4) able to have greater staffing flexibility, and (5) able to place more students in jobs.

Adult Schools

Mission:

Adult education within the current vocational education system can generally be categorized into six types: (1) job-specific preparation, (2) occupation-specific education, (3) occupational area preparation, (4) employability, (5) prevocational guidance, and (6) prevocational basic education. The State's adult education program provides mostly basic education, including high school courses, and continuing education to adults (persons 18 years old or older) in public schools, in addition to vocational and occupational training. The emphasis of vocational and occupational training in adult schools is on short-term, job-specific skills training, including pre-employment skills training.

Enrollment:

Currently, 223 public school districts offer adult education classes. It is estimated that 30-40 of these districts have large vocational programs while the remainder offer a few courses or a limited number of adult vocational programs. Most adult vocational education under the auspices of the State Department of Education takes place in ROCPs.

The data in Appendix Table 1-4 show that in 1984-85, there were 28,639* students enrolled in adult vocational education classes. Slightly over 60 percent of enrollees were females, and 88 percent were attending ROCPs. Appendix Table 1-5 shows that adult enrollments in vocational education have fluctuated since 1981, and that the 1983-84 school year had the highest enrollments. A decline of 34 percent occurred between 1983 and 1984. Once

*This figure represents a "snapshot" of enrollment at a particular time. Adult vocational classes do not always begin and end on a semester basis. It is likely that some classes began after this count was taken.

again, most enrollments are in the two program categories of Trade & Industrial Education (37%) and Office Education (39%). ROCP enrollments in these two programs have declined over the last four years, while enrollments in non-ROCP Office Education programs have risen substantially.

After some years of steady enrollment growth, adult vocational education programs enrollments have experienced a recent decline. Money is a major problem. No new adult programs can be started because of a legislatively imposed spending cap, and revenue limits per unit of ADA for adult vocational programs in 1984-85 year ($1,071) was substantially below that of ROCPs and Community Colleges. The lack of funds, according to Department of Education personnel, has limited the number of classes which can be offered and reduced the amount of money available to purchase necessary equipment.

Community Colleges

Mission:

The Commission has already recommended that vocational education should be a primary function of Community Colleges, along with transfer preparation for students seeking a baccalaureate degree.

Currently, vocational education is offered at 70 Community College districts and on 106 individual campuses. About 35 percent of the total weekly student contact hours generated in Community Colleges result from vocational education courses. Further, over 75 percent of all students enrolled in Community Colleges are enrolled in at least one vocational course.

Vocational education in the Community Colleges provides entry-level occupational skills, job skills upgrading, and retraining. Programs vary in complexity, and the length ranges from a single course to a two-year degree program which includes general education, specific vocational education, and supportive/related courses.

Vocational education in the California Community Colleges is a huge enterprise. As Appendix Table 2-1 shows, about one million students are served in vocational education. Total enrollments remained fairly stable from 1979 to 1982.

The data in Appendix Table 2-3 show that over one-half (53%) of Community College vocational students are female. Ethnic breakdowns illustrate that while most vocational students are white (64%) they are somewhat underrepresented as a percentage of the State's population, while Hispanics are even more underrepresented. Blacks and Asians, on the other hand, are overrepresented (see Appendix Table 1-2).

The largest program areas by enrollment are Business and Management (34%), Manufacturing and Technology (17%) and Computer and Data Processing (13%). These three program areas account for about 2/3 of all vocational enrollments. The largest number of contact hours occur in business and engineer ing programs, both of which (along with those in the "Other" category) offer the most courses.

There have been a number of studies and reports on Community Colleges vocational education in recent years. Most of these documents point to a lack of State level policy; the most recent study concluded that "the Chancellor's Office, California Community Colleges, lacks a cohesive and agreed upon statement of the purpose and role of vocational education in Community Colleges in California" (Pathways to Progress, 1986). The Board of Governors itself subscribed to the notion at its March, 1986 meeting, recognizing the effects on the development and delivery of vocational education at the State and local levels.

Another frequent problem mentioned is the time it takes to implement new vocational programs, particularly degree programs. The internal and external governing systems which approve new programs are cumbersome. New program development can take as long as two years (although new course development can be a much faster process).

A recent survey of Community College vocational administrators shows they anticipate enrollments in vocational programs will increase over the next five years. Increases are expected among adult students (over the age of 24), disadvantaged and limited-English proficient students, and students having goals related to career improvement.

Proprietary Schools

Mission:

There are approximately 2700 private postsecondary institutions in California, of which about 350 are degree-granting institutions. Most proprietary schools offering vocational education are single-purpose, providing a single vocational program or a few programs clustered in one occupational field. A recent survey discovered that 80 percent of all proprietary schools specialize in the occupational clusters of technical (35%), business (23%), or cosmetology (21%) (Wilms, 1984).

Private postsecondary schools operate under the auspices of the Private Postsecondary Education Act of 1977, as amended in 1984. The private sector is represented by the Council for Private Postsecondary Education Institutions which advises the Superintendent of Public Instruction regarding the administration and enforcement of laws pertaining to private postsecondary education. The Council also has a relationship with the California Postsecondary Education Commission (OPPE Information Bulletin, no.26, 1983).

Enrollments:

It is difficult to obtain comprehensive enrollment figures from the diverse proprietary school system in California, especially since there is no mandated reporting requirement for that sector. However, a 1983 analysis of 1,387 proprietary schools (with a detailed study of 210 schools) provides some indication of the size of the enterprise.

The schools were classified into three sizes: small (under 50 students), medium (51-200), and large (over 200). (Appendix Table 3-1 shows the number of schools in each category.) Many small and medium sized schools are typed

as "technical" and most large sized schools are "business" or "cosmetology." Data in Appendix Table 3-3 indicate that the overwhelming number of schools (62%) are not accredited by a professional or regional accrediting group; this is especially true for "technical" schools. Appendix Table 3-4 illustrates that the average length of the program offered was from a low of 454 hours in "technical" schools to a high of 824 hours in "cosmetology" schools.

Appendix Table 3-5 shows a combined (both new and continuing students) total enrollment of 467,588 students. Most students are enrolled in business schools (29%), cosmetology schools (26%), and technical schools (26%). This table also shows Available Capacity as reported by the 1,387 school respondents. These respondents reported that their schools were operating at about 80 percent of capacity and could together accommodate another 95,556 students. Appendix Table 3-6 reports perceptions of chief competition by school type. The majority (60%) see other proprietary schools as their competition while less than one-third (27%) see Community Colleges in this role.

Two major problems normally associated with proprietary schools are high costs and uneven quality of programs. The average tuition for a proprietary school reported in the 1984 study was $2,743 with a range of $1,681 for cosmetology schools to $3,628 for technical schools. These costs are extremely high when compared to adult school and Community College programs. Since most proprietary schools are not accredited, serious concerns can be raised. Without an external review and maintenance of standards, there is no guarantee of quality and consistency. On the other hand, proprietary schools demostrate a responsiveness to the needs of business and industry and generally have high placement rates for those who complete their programs.

Another criticism of proprietary schools is one frequently leveled at all short-term employment training programs: that they provide "training" but not "education," and that while initial placement rates are high, the long-term success of completers is limited due to the narrow training they receive. With a changing economy and more complexity in skilled jobs, a general education stressing critical thinking skills is often more valuable than short-term, specific training preparation. At the present time, however, there is little empirical evidence to demonstrate the long-term effectiveness or lack thereof of proprietary school vocational education.

Other Providers

There are at least three other entities in the state that play a role, though limited, in vocational education.

First, the CSU system, through its extension services, offers a limited number of vocational education courses similar to those offered by adult schools and the nondegree programs in the Community Colleges. Enrollments in these courses are very small compared to those in the other sectors of vocational education.

Second, the Department of Corrections, using federal and state funds, generally contracts with local Community Colleges to provide vocational education courses in correctional institutions. The numbers of enrollees is relatively small.

Finally, the Division of Apprenticeship Standards contracts with Community Colleges, adult schools, ROCPs, and secondary schools for "related apprenticeship training." Presently, there are approximately 24,000 apprentices involved at the secondary and Community College levels.

Summary

Vocational education in California is intended as an organized system made up of many providers who offer programs and courses geared to a variety of audiences and needs. Though this diversity is one of the system's key assets, it has also led to duplication of effort and a lack of coordination among programs. These two problems have long been recognized in California, but solutions attempted to date have not been entirely successful. The challenge, then, is to solve the problems without unnecessarily hindering the interrelationship among the programs and their audiences.

EMPLOYMENT TRAINING: THE CALIFORNIA EXPERIENCE

Employment training is defined as "the teaching of specific skills necessary for particular jobs" (Assembly Committee on Economic Development and New Technology, 1983). "Such training is usually intensive, job specific and of short duration" (Concept Paper: Vocational Education Policy for California Community Colleges, 1986).

Employment and training programs in California are extremely diverse. In one way or another, a number of departments amd agencies are involved, as shown in Chart 2 of the Appendix. The departments and agencies frequently administer federal and State programs created to solve specific social, economic, and political problems. The Job Training Partnership Act (JTPA), Work Incentive Program (WIN), Greater Avenues for Independence (GAIN), and Employment Training Panel (ETP) are examples of federal and state employment training related programs. At the local level, there are numerous employment training programs involving employers and local educational agencies. These arrangements frequently are referred to as "contract education," and are intended to work closely with business, industry, and governmental agencies to meet specific training needs.

Frequently the major providers of vocational education are also the major providers of employment training. For example, in California there are 51 Service Delivery Areas (SDAs) to administer JTPA programs. Community Colleges, ROCPs, and proprietary schools are all working with the Private Industry Councils (PIC) in the SDAs to develop and deliver employment training programs. This is an example of involvement with a federal program. At the state level, adult schools and Community Colleges are preparing to provide training programs as a part of the GAIN program.

The Problems

According to the Assembly Office of Research, "it is clear that California does not have a system for employment preparation serving either youth or adults. California's employment preparation programs and activities are isolated efforts that suffer from duplication and a lack of coordination" (Training Tomorrow's Workers, 1983). Another report indicated that "the nature of job training programs is becoming a bewildering labyrinth to workers and administrators alike. Efforts must be made to comprehensively identify and categorize these programs in terms of objectives and approaches in an effort to determine potential duplication and possible need for coordination and consolidation" (Updating Vocational and Technical Training, 1982). In its Fourteenth Annual Report, The California State Council on Vocational Education indicated it would continue to support legislation which provided for "the establishment of planning processes that address unnecessary duplication, delineation of function, articulation and linkages with other job training providers" (A Call for Action, 1984).

The problems most frequently mentioned with employment development and vocational education are those involving governance, coordination, and planning. The problems are generally stated in terms of duplication of efforts, gaps in serving students, unnecessary competition, and conflicts and turf battles among providers.

Present System for Solving Problems

The problems identified in this report have been discussed for some years. In 1967, an Arthur D. Little study concluded that the present administrative structure for vocational education was inadequate. Most recently, the Superintendent's Vocational-Technical Management Advisory Committee identified the following problem areas: multiple accounting, duplication of services, and internal fights for funds (Report to California State Superintendent of Public Instruction, 1986).

There have been attempts to solve the problems. The Joint Committee on Vocational Education which was established in 1978, and is now known as the Joint Advisory Policy Committee (JAPC), is composed of members of the State Board of Education and the Board of Governors. Its two major functions have been: (1) to determine how to divide the federal funds for vocational education between the two boards, and (2) to jointly develop and review State Plans and Accountability Reports required under federal vocational education legislation. The group, however, was crippled by problems, notably a belief by some that the JAPC's focus was too narrow because it made recommendations only to the Board of Education and the Board of Governors and further, by the JAPC's apparent inaction in dealing with substantive problems. In any case, the group is now inactive, and in the meantime each of the boards has created its own subcommittee on vocational education.

Another major attempt to solve the problems was the Governor's Coordination and Special Services Plan (GCSSP) in April 1984. The Plan required the development and implementation of a multi-party agreement among the primary state agency providers of job training and vocational education services. These included, the Department of Commerce, the Department of Rehabilitation, the Community College Chancellor's Office, the Department of Aging, the Department of Social Services, the Department of Veteran Affairs, the Employment Development Department, the Employment Training Panel, the State Department of Education, and the Department of Industrial Relations.

The two-part coordination agreement was signed by all parties. Its goal: "that all programs funded under JTPA will be fully coordinated and nonduplicative of other State and local programs." To ensure that this goal is attained, the agreement requires each participating organization to work in conjunction with all others participating to:

- Carry out the intent of the Job Training Partnership Act.
- Carry out the intent of the Governor's Goals for Employment and Training Programs.
- Meet the requirements and intent of the Governor's Coordination and Special Services Plan.
- Cooperate in the coordination of program development.
- Identify the role of each department and its responsibilities for employment and training programs, including related services.

- o Exchange information, cooperate and coordinate in order to effect program linkages at the state and local levels.

- o Designate a staff person at the state level to act as liaison with the participating organization.

- o Develop mechanisms for information exchange, cooperation, and coordination at the local level. Inform the local counterparts of the state level agreements and the mechanisms developed for local use. Each participating organization will direct its local counterparts to name a local level coordination contact, or will encourage such local coordination in the absence of line authority.

- o Upon request, provide plans for employment and training programs, including related services, to the State Job Training Coordinating Council for review, comment, and recommendations as described in Section 122 of the Job Training Partnership Act.

- o Cooperate with the State Job Training Coordinating Council in additional study for improving coordination efforts.

- o Discuss policy issues of mutual interest on an ongoing basis.

This coordination effort is being undertaken by the State Job Training Coordinating Council (SJTCC), which in statute is to develop and improve coordination efforts and to recommend changes in law and administration that now hamper coordination. In August 1984, the SJTCC reformed its committee structure and created a Coordination Committee with members representing the State Department of Education, the Community College Chancellor's Office, the Employment Development Panel, and the Business, Transportation, and Housing Agency. This Committee makes recommendations to SJTCC regarding coordination matters.

There have also been local coordination efforts under the leadership of the SJTCC. The JTPA requires State Education Coordination and Grants (SECG) funds to be used to "facilitate coordination of and training services for eligible participants." In 1983-84, over 150 local education agencies (LEAs) were funded to provide SECG services. These LEAs were encouraged to provide coordination and linkage services to enhance the regular JTPA programs in their areas.

Another coordination effort is evolving from the Carl Perkins Vocational Education Act of 1984, and will attempt to bring together vocational education and JTPA. The coordination provisions state that:

1. One member of the State Council on Vocational Education must be a private sector member of the SJTCC.

2. The State Council on Vocational Education must advise and make recommendations every two years on coordination between the vocational education system and JTPA.

3. The State Vocational Education plan must be submitted to the SJTCC for review and comment.

4. The plan must describe the methods prepared for joint coordination between vocational education and JTPA.

5. Local plans must describe coordination with programs under JTPA.

Most of the coordination efforts at the State and local level are between the major federal job training program (JTPA) and vocational education. Local coordination efforts between public and private providers of vocational education and all types of employment preparation providers is still lacking on a statewide basis. Nevertheless, there have been numerous attempts to increase coordination and cooperation. Regional planning by California Area Manpower Committees (CAMP) originally dealt with apprenticeship and Department of Labor programs. Later, area planning was tried in five experimental areas with some success. Adult Education Coordinating Councils were also created to address delineation of function among college adult nondegree programs. Finally, the Regional Adult and Vocational Education Councils (RAVEC) model was developed to bring providers of vocational education together for coordination and planning. None of these programs remain in existence on a statewide basis, but some level of coordination remains in all areas of the state. Some of it is highly informal and not well developed. In other parts of the state, coordination among providers of vocational education and employment training is well developed and has been in existence for some time. In these cases, coordination activities effectively reduce the impact of the problems identified in this report.

Conclusion

The problems related to governance reflect the reality that many different agencies are involved in the provision or administration of vocational education, and especially of employment training. The lines of authority and responsibilities between these agencies are blurred, and the role of each agency is often not clearly defined.

Coordination and planning problems are related, and to an extent flow from the governance problems. The lack of meaningful coordination and cooperation leads to inadequate and sporadic planning. In fact, planning is primarily done to meet a federal or state mandate and takes the form of a compliance exercise rather than the formulation of a comprehensive course of action involving the major providers of vocational education and employment training programs. Coordination and planning at both the state and local levels are lacking though recent state level coordination efforts are attempting to improve the situation. At the local level, coordination and planning is uneven and is very limited when involving private sector providers of vocational education. Local level coordination and planning involving JTPA programs is continuing to develop.

Numerous efforts to improve coordination and planning and to identify the proper governance role of agencies involved in vocational education and employment training at the state and local levels have been attempted over the last two decades. While some of these efforts have recorded successes, they have not been sustained over time. An apparent reason for this is that at the state and local levels the providers of vocational education have been concerned with protecting what they already have, convinced that they should be the primary provider of vocational education and/or employment training, sure that they can best provide the necessary programs and services, and suspicous of the intention of other participants.

These debilitating attitudes can easily hamper the effectiveness of any efforts for improvement. Negative threats and positive incentives have in the past resulted in little demonstrable success. Hence attitudes among the providers must be recognized, acknowleged, and dealt with before success can be achieved.

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APPENDIX

KEY INTERVIEW QUESTIONS

I. Vocational Education Providers

1. Who are the principal providers of vocational education in the State?

2. What is your agency/group's mission in vocational education?

3. What are the major missions of the other providers you mentioned?

4. What functions are unique to these providers?

5. What types of coordination exist between providers?

6. What areas of overlap or duplication exist or what gaps exist between providers?

II. Administration/Governance

1. How is the entire vocational education system administered or governed?

2. What problems do you see with governance/administration?

III. Private Sector Involvement

1. What is the role of the private sector in vocational education?

IV. Strengths & Weaknesses

1. What are the strengths of the vocational education system and which one is the most major strength?

2. What are the weaknesses of the vocational education system and which one is the most major weakness?

V. Change

1. If you could implement any change to improve the vocational education system in the State, what would you recommend?

2. What other comments do you have about the system?

INTERVIEWS CONDUCTED

AGENCY/ORGANIZATION NAME	PERSON CONTACTED
1. California Postsecondary Education Commission (CPEC)	Dr. Patrick Callan Dr. Keith Pailthorp
2. Department of Education	
A. Vocational Education Division	Mr. James Allison Ms. Peggy Olivier
B. Adult Education	Mr. Don McCune
C. Private Postsecondary Education	Mr. John Petersen
3. Board of Governors	Mr. William Anderson Mr. Doug Cronin
4. California State Council for Vocational Education (CSCVE)	Dr. Thomas Bogetich
5. Employment Development Department Job Training Coordination Council	Mr. Dean Smith
6. Assembly Office of Research	Ms. Lynn Delap
7. Senate Office of Research	Ms. Kim Connor
8. Legislative Analyst's Office	Mr. Mike Mesbaum
9. Senate Industrial Relations Committee	Mr. Allen Davenport
10. California Association of Community Colleges Occupational Education Coalition	Dr. Doug Burris

CHARTS

1 Federal Vocational Education Policies

2 Organizations Concerned with Employment and Training Programs and Activities in California

CHART 1

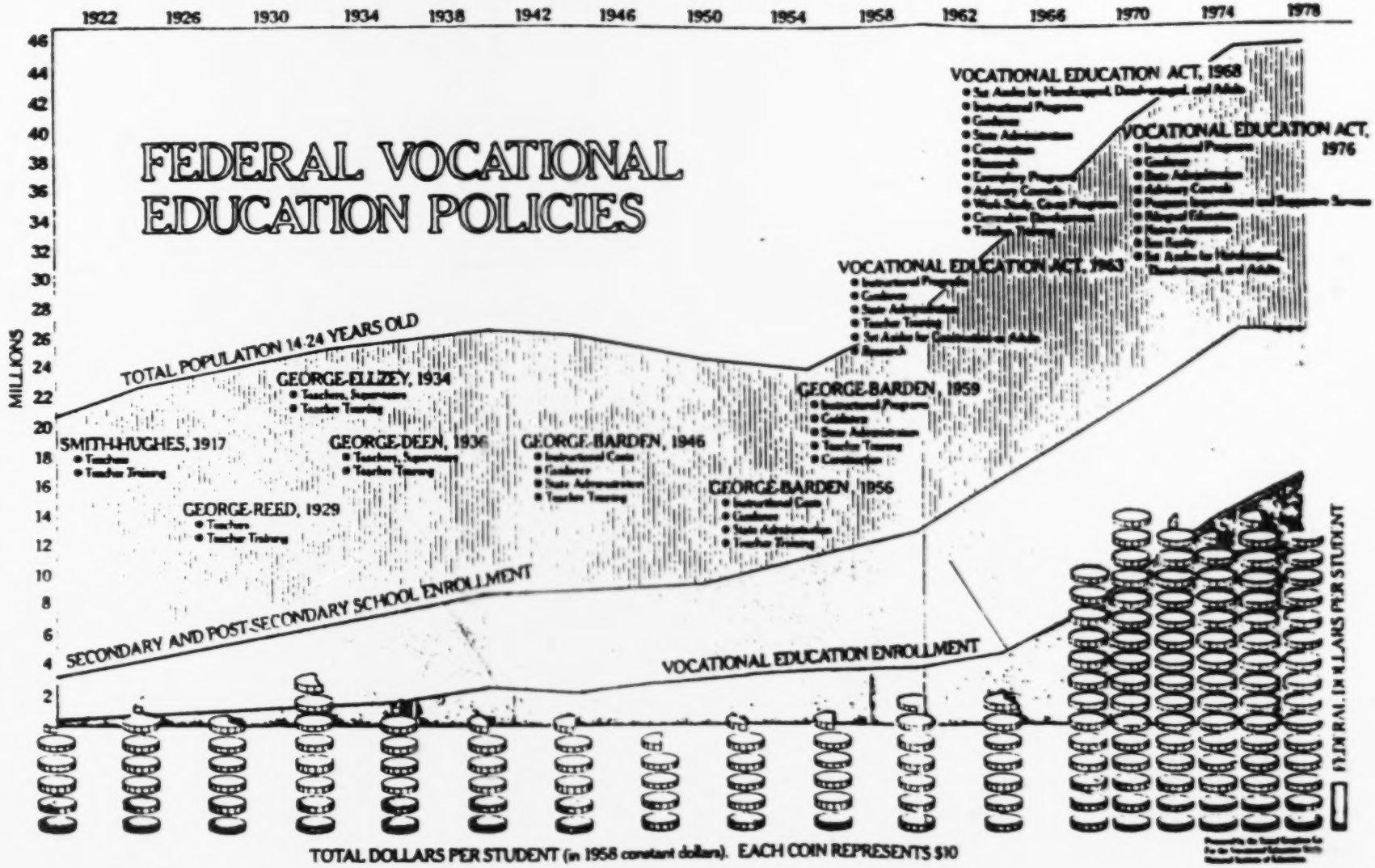
FEDERAL VOCATIONAL EDUCATION POLICIES
1922
1926
1930
1934
1938
1942
1946
1950
1954
1958
1962
1966
1970
1974
1978
MILLIONS
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
TOTAL POPULATION 14-24 YEARS OLD
SECONDARY AND POST-SECONDARY SCHOOL ENROLLMENT
VOCATIONAL EDUCATION ENROLLMENT
SMITH-HUGHES, 1917
GEORGE-REED, 1929
GEORGE-ELLZEY, 1934
GEORGE-DEEN, 1936
GEORGE-BARDEN, 1946
GEORGE-BARDEN, 1956
GEORGE-BARDEN, 1959
VOCATIONAL EDUCATION ACT, 1963
VOCATIONAL EDUCATION ACT, 1968
VOCATIONAL EDUCATION ACT, 1976
TOTAL DOLLARS PER STUDENT (in 1958 constant dollars). EACH COIN REPRESENTS $10

CHART 2
ORGANIZATIONS CONCERNED WITH EMPLOYMENT AND TRAINING PROGRAMS AND ACTIVITIES IN CALIFORNIA*

STATE AGENCIES

- Department of Aging
- California Conservation Corps
- California Youth Authority
- Chancellor's Office of California Community Colleges
- University of California
- California State University
- Department of Corrections
- Department of Commerce
- Office of Economic Opportunity
- State Department of Education
- Employment Development Department
- Department of Industrial Relations
- Department of Rehabilitation
- Department of Social Services
- Employment Training Panel

STATE AND LOCAL ADVISORY BODIES

- California State Council on Vocational Education
- California Occupational Information Coordinating Council
- California State Job Training Coordinating Council
- Private Industry Councils
- California Employer Council
- State Council on Developmental Disabilities

LOCAL AGENCIES

- Area Agencies on Aging
- Community Based Organizations
- Community Services Organizations
- County Welfare Departments
- District Offices of the Division of Apprenticeship Standards
- EDD Job service Offices
- Local Education Agencies
- Local Labor Organizations
- Local Social Service Agencies
- Department of Rehabilitation Offices
- Services Delivery Areas
- Veteran Organizations

*The organizations concerned with employment and training programs in California are not limited to those listed here.

LIST OF TABLES

1-1 Enrollments in California Public Schools, 1981-82 through 1984-85.

1-2 Racial and Ethnic Distribution of Students in California Public Schools, 1981-82 and 1984-85.

1-3 Racial and Ethnic Distribution of Students in California Public Schools, Grades 9-12.

1-4 Enrollment by Grade Level and Sex in Vocational Education Programs.

1-5 Distribution of Students Enrolled in Vocational Education Programs in Secondary Schools and Regional Occupational Centers and Programs, 1981-82 through 1984-85.

2-1 California Community Colleges Vocational Enrollments.

2-2 Statewide Summary Credit and Noncredit Courses and Total Student Contact Hours by Classification Category, 1983-84.

2-3 California Community College Enrollments by Ethnic and Sex Percentages, 1979-80 through 1983-84.

2-4 Summary Data -- Credit and Noncredit Courses and Contact Hours -- Occupational Courses.

2-5 Summary of Vocational Education Enrollments.

3-1 Original School Sample and Response Rate by School Size and Type.

3-2 School Size, by Type of Proprietary School.

3-3 Accreditation Status, by School Type.

3-4 Program Length, by School Type.

3-5 New Starts, Continuing Students, and Available Student Capacity, by School Type.

3-6 Perceived Chief Competitor, by School Type.

4-1 Vocational Education Enrollments by System.

Table 1-1
Enrollments in California Public Schools
1981-82 through 1984-85

LEVEL	ENROLLMENTS				PERCENT		
	1984-85	1983-84	1982-83	1981-82	Between 1983-84 and 1984-85	Between 1982-83 and 1983-84	Between 1981-82 and 1983-82
State Total	4,151,110	4,089,017	4,065,486	4,046,156	1.52	0.58	0.48
K	336,766	319,328	313,584	300,239	5.46	1.83	4.44
1	330,089	322,144	308,359	298,341	2.47	4.47	3.36
2	315,807	300,621	292,515	287,652	5.05	2.77	1.69
3	303,547	293,402	288,150	282,464	3.46	1.82	2.01
4	298,081	290,277	282,776	290,323	2.69	2.65	(2.60)
5	294,265	285,894	291,642	310,874	2.93	(1.97)	(6.19)
6	290,546	294,405	313,067	324,324	(1.31)	(5.96)	(3.47)
7	306,763	324,883	334,426	322,264	(5.58)	(2.85)	3.77
8	324,432	333,082	323,194	307,429	(2.60)	3.06	5.13
Other elementary	45,666	49,488	54,105	45,878	(7.72)	(8.53)	17.93
Subtotal, elementary	2,845,962	2,813,524	2,801,818	2,769,788	1.15	0.42	1.16
9	364,166	346,363	331,791	326,143	5.14	4.39	1.73
10	352,756	335,492	330,936	334,287	5.15	1.38	(1.00)
Subtotal, grades 9-10	716,922	681,855	662,727	660,430	5.14	2.89	0.35
11	307,314	301,223	303,598	311,518	2.02	(0.78)	(2.54)
12	254,211	266,889	270,700	280,818	(4.75)	(1.41)	(3.60)
Subtotal, grades 11-12	561,525	568,112	574,298	592,336	(1.16)	(1.08)	(3.05)
Other secondary	26,701	25,526	26,643	23,602	4.6	(4.19)	12.88
Subtotal secondary	1,305,148	1,275,493	1,263,668	1,276,368	2.32	0.94	(1.00)

SOURCE: Enrollment Data, California Elementary & Secondary Public Schools, 1984-85
Enrollment Data, California Elementary & Secondary Public Schools, 1983-84

Table 1-2
Racial & Ethnic Distribution of Students
in California Public Schools
1981-82 and 1984-85

RACIAL OR ETHNIC GROUP	Grades K-12 1984-85	Percent 1984-85	Grades K-12 1981-82	Percent 1981-82	CALIFORNIA POPULATION (1980 CENSUS
AMERICAN INDIAN/ALASKAN NATIVE	31,675	0.76	32,647	0.81	0.80
ASIAN OR PACIFIC ISLANDER	276,966	6.67	221,899	5.48	3.50
FILIPINO	76,516	1.84	64,425	1.59	1.50
HISPANIC	1,158,668	27.91	1,045,186	25.83	19.20
BLACK (NOT HISPANIC)	401,986	9.68	339,171	9.87	7.60
WHITE (NOT HISPANIC)	2,205,299	53.13	2,282,828	56.42	67.40
TOTAL	4,151,110	100.00	4,046,156	100.00	23,667,902

Source: Racial or Ethnic Distribution of Staff & Students in California Public Schools, 1984-85, Sacramento, 1985 Fingertip Facts on Education

Table 1-3
Racial & Ethnic Distribution of Students
in California Public Schools
Grades 9-12
1984-85

RACIAL OR ETHNIC GROUP	Grades 9-12 1984-85	Percent 1984-85	VOC. ED. EXCLUDING ROC/P** 1984-85	VOC. ED. PERCENT 1984-85	CALIFORNIA POPULATION (1980 CENSUS
AMERICAN INDIAN OR ALASKAN NATIVE	11,281	0.86	6,378	1.00	0.80
ASIAN OR PACIFIC ISLANDER	88,883	6.81	35,937	5.65	3.50
FILIPINO	23,082	1.77	10,012	1.57	1.50
HISPANIC	293,029	22.45	147,527	23.20	19.20
BLACK (NOT HISPANIC)	126,323	9.68	378,021	9.11	7.60
WHITE (NOT HISPANIC)	762,550	58.43	378,021	59.46	67.40
TOTAL	1,305,148	100.00	635,778	100.00	23,667,90

**ROC/P excluded to compare data without the influence of adults.

Table 1-4
Enrollment by Grade Level & Sex In Vocational Education Programs*
High Schools (Grades 9-12 & Adult)
ROC/P'S (Grades 9-12 & Adult)
1984-85

LEVEL	ENROLLEES* 1984-85 High School	Percent 1984-85 ***	Percent 1984-85 ****	ENROLLEES* 1984-85 ROC/P'S	Percent 1984-85 ***	Percent 1984-85 *****	TOTAL ENROLLEES* 1984-85	Percent 1984-85
Grades 9-10 Total	370,537	42.93	36.44	22,853	18.25	2.25	393,390	39.80
Grade 9-10 Males	210,310	56.75		12,410	54.30		222,720	56.62
Grade 9-10 Females	160,227	43.24		10,443	45.70		170,670	43.38
Grades 11-12 Total	353,406	40.95	34.75	95,222	76.04	9.36	448,628	45.39
Grade 11-12 Males	174,618	49.41		48,941	51.40		223,559	49.83
Grade 11-12 Females	178,788	50.59		46,281	48.60		225,069	50.17
Other Secondary	0			0			0	
Grade Unknown**	139,128	16.12	13.68	7,150	5.71	0.70	146,278	14.80
Grade Unknown Males	77,909	56.00		2,695	37.69		80,604	55.10
Grade Unknown Females	61,219	44.00		4,455	62.31		65,674	44.90
Total Secondary	863,071	100.00	84.87	125,225	100.00	12.31	988,296	100.00
Secondary Males	462,837	53.63		64,046	51.14		526,883	53.31
Secondary Females	400,234	46.37		61,179	48.86		461,413	46.69
Total Adult	3,315	100.00	0.33	25,324	100.00	2.49	28,639	100.00
Adult Males	744	22.44		10,692	42.22		11,436	39.93
Adult Females	2,571	77.56		14,632	57.78		17,203	60.07
Grand Total	866,386	100.00	85.20	150,549	100.00	14.80	1,016,935	100.00
Males	463,581	53.51		74,738	49.64		538,319	52.94
Females	402,805	46.49		75,811	50.36		478,616	47.06

* Source: CBEDS Vocational Education Date (Enrollees: duplicated count)
** Grade Unknown includes grades 7 & 8 identified for the first time in 1984-85
*** Percent distribution of Enrollees, High School and ROC/P
**** Percent distribution of high school in total enrollees
***** Percent distribution of ROC/P in Total Enrollees

Table 1-5
Distribution of Students Enrolled in Vocational Education Programs in Secondary Schools and Regional Occupational Centers and Programs*
1981-82 through 1984-85

USOE CODE	Program Area	Grades 9-12 Secondary (NON-ROC/P)	Adult (NON-ROC/P)	Grades 9-12 Secondary (ROC/P only)	Adult (ROC/P only)	TOTAL
	1984-85					
01.xx	Agriculture Ed.	40,811	25	7,592	795	49,2
04.xx	Distributive Ed.	4,124	57	12,212	1,450	17,8
07.xx	Health Ed.	8,309	13	6,893	3,609	18,8
09.01	Consumer & Homemaking Ed.	142,833	0	1,040	0	143,8
09.02	Home Econ. Related Occup. Ed.	22,627	0	6,382	470	29,4
10.xx	Industrial Arts Ed.	238,732	203	2,690	184	241,8
14.xx	Office Ed.	299,679	2,578	34,343	8,466	345,0
16.xx	Technical Ed.	3,140	0	1,216	238	4,5
17.xx	Trade & Industrial Ed.	67,838	382	52,794	10,112	131,1
19.xx	Work Experience Ed.	34,978	57	63	0	35,0
	TOTAL	863,071	3,315	125,225	25,324	1,016,9
	Percent increase of (decrease) Between 1983-84 and 1984-85	0.1	(18.3)	18.2	(35.5)	0.6
	1983-84					
01.xx	Agriculture Ed.	42,442	105	8,007	899	51,4
04.xx	Distributive Ed.	5,499	19	11,388	1,575	18,4
07.xx	Health Ed.	13,203	184	6,708	4,197	24,2
09.01	Consumer & Homemaking Ed.	144,076	887	0	0	144,9
09.02	Home Econ. Related Occup. Ed.	28,340	161	6,680	838	36,0
10.xx	Industrial Arts Ed.	263,870	292	0	0	264,1
14.xx	Office Ed.	268,589	1,655	28,298	12,800	311,3
16.xx	Technical Ed.	7,630	0	1,437	132	9,1
17.xx	Trade & Industrial Ed.	56,744	675	43,025	18,836	119,2
19.xx	Work Experience Ed.	31,560	80	425	0	32,0
	TOTAL	861,953	4,058	105,968	39,277	1,011,2
	Percent increase of (decrease) Between 1982-83 and 1983-84	(9.7)	121.7	(4.9)	(3.6)	(8.8)

Table 1-5
Distribution of Students Enrolled in Vocational Education Programs in Secondary Schools and Regional Occupational Centers and Programs*
1981-82 through 1984-85

VOC ED CODE	Program Area 1982-83	Grades 9-12 Secondary (NON-ROC/P)	Adult (NON-ROC/P)	Grades 9-12 Secondary (ROC/P only)	Adult (ROC/P only)	TOTAL
xx	Agriculture Ed.	48,109	42	9,040	1,506	58,697
xx	Distributive Ed.	7,417	0	17,242	1,668	26,327
xx	Health Ed.	24,191	0	6,744	3,752	34,687
01	Consumer & Homemaking Ed.	167,527	24	0	0	167,551
02	Home Econ. Related Occup. Ed.	33,869	72	6,451	737	41,129
xx	Industrial Arts Ed.	303,809	199	0	0	304,008
xx	Office Ed.	259,646	630	24,855	13,246	298,377
xx	Technical Ed.	7,014	22	2,067	597	9,700
xx	Trade & Industrial Ed.	60,203	502	44,961	19,237	124,903
xx	Work Experience Ed.	43,166	339	87	0	43,592
	TOTAL	954,951	1,830	111,447	40,743	1,108,971
	Percent increase or (decrease) Between 1981-82 and 1982-83	(12.0)	(10.4)	21.7	42.1	(8.2)
	1981-82					
xx	Agriculture Ed.	49,968	82	7,431	412	57,893
xx	Distributive Ed.	9,693	113	12,118	1,281	23,205
xx	Health Ed.	69,407	31	6,601	2,253	78,292
01	Consumer & Homemaking Ed.	195,389	46	0	0	195,435
02	Home Econ. Related Occup. Ed.	29,318	158	5,769	310	35,555
xx	Industrial Arts Ed.	315,315	197	0	0	315,512
xx	Office Ed.	278,818	752	18,955	9,389	307,914
xx	Technical Ed.	10,497	40	1,754	294	12,585
xx	Trade & Industrial Ed.	68,646	397	38,883	14,736	122,662
xx	Work Experience Ed.	58,048	227	82	0	58,357
	TOTAL	1,085,099	2,043	91,593	26,675	1,207,410

Data Source: California Basic Educational Data System (CBEDS)

TABLE 2-1

CALIFORNIA COMMUNITY COLLEGES

VOCATIONAL ENROLLMENTS[1]

	1979-80	1980-81	1981-82	1982-83	1983-84
HEADCOUNT	1,048,154	1,087,431	1,148,215	1,060,751	973,087

[1] Taken from Vocational Education Data System (VEDS) reports

Table 2-2
Statewide Summary*
Credit and Noncredit Courses and Total Student Contact Hours
By Classification Category
1983-84

Category	CREDIT			NONCREDIT*			TOTAL		
	Number of Courses	Student Contact Hours (1000)	Percent of Category Workload	Number of Courses	Student Contact Hours (1000)	Percent of Category Workload	Courses	Student Contact Hours (1000)	Percent of Category Workload
Liberal Arts and Sciences -BA Degree	50,173	155,546	52	286	296	1	50,459	155,842	48.6
Liberal Arts and Sciences -AA Degree	3,701	11,402	4	36	88	-	3,737	11,490	3.6
Compensatory (Short-Term Remedial)	2,616	14,033	5	105	450	2	2,721	14,483	4.5
Developmental and Survival	956	1,159	-	995	5,988	26	1,951	7,147	2.2
Community or Continuing Education (incl. Adult, Elementary and Secondary)	1,894	2,159	1	3,018	10,508	45	4,992	12,667	3.9
Occupational	52,539	109,345	36	2,321	4,767	20	54,860	114,112	35.6
Invalid and Unclassified	3,969	3,433	1	1,806	1,169	5	5,775	4,602	1.4
TOTALS (ROUNDED)	115,848	297,077	99	8,567	23,266	99	124,495	320,343	99.8

* Reports from 96 colleges offering credit course and 50 colleges and centers offering noncredit courses.

** Includes only ADA generating noncredit courses.

Table 2-3
CALIFORNIA COMMUNITY COLLEGES
ENROLLMENTS BY ETHNIC AND SEX PERCENTAGES[1]
1979-80 to 1983-84
VOCATIONAL ENROLLMENTS

	1979-80	1980-81	1981-82	1982-83	1983-84
GENDER					
MALE	45.8	46,8	46.7	47.4	47.2
FEMALE	54.2	53.2	53.3	52.6	52.8
ETHNICITY					
AMERICAN INDIAN	1.8	1.5	1.5	1.6	2.0
ASIAN	6.3	7.0	7.3	8.3	10.2
BLACK	10.6	9.7	9.2	9.6	9.9
HISPANIC	10.5	10.7	11.0	11.4	12.6
WHITE	64.0	69.3	69.6	68.2	64.0
NON RESIDENT ALIEN	.3	.7	1.1	.9	1.3
UNREPORTED	6.5	1.1	.3	-0-	-0-
	100	100	100	100	100

1. Taken from Vocational Education Data System (VEDS) reports

Table 2-4

Summary Data
Credit and Noncredit Courses and Contact Hours
Occupational Courses
1983-84

Category	CREDIT			NONCREDIT			TOTAL		
	Number of Courses	Student Contact Hours (1000)	Percent of Total Workload	Number of Courses	Student Contact Hours (1000)	Percent of Total Workload	Courses	Student Contact Hours (1000)	Percent of Total Workload
Occupational Education									
o Business	11,093	29,102	9.8	497	1,472	6.3	11,590	30,574	9.5
o Computer Science	1,673	11,094	3.7	114	240	1.0	1,787	11,334	3.5
o Engineering, etc.	15,109	25,386	8.5	434	1,452	6.2	15,543	26,838	8.4
o Health Occupations	5,093	11,665	3.9	542	45	0.2	5,635	11,710	3.7
o All Others*	19,571	32,098	10.8	734	1,558	6.7	20,305	33,656	10.5
TOTALS	52,539	109,345	36.7	2,321	4,767	20.4	54,860	114,112	35.6
TOTALS FOR SYSTEM	115,848	297,077		8,567	23,266		124,495	320,343	

* Occupational courses were reported in 19 other disciplines, but none with greater than three percent of the workload.

Table 2-5
Summary of Vocational
Education Enrollments
1983-84

TOPS	TITLE	ENROLLMENT TOTAL
01	Agriculture	22,842
02	Architecture	6,326
05	Business/Mgmt.	328,206
06	Communications	5,715
07	Computer/DP	124,504
08	Special Education	3,546
09	Manuf./Tech.Ed.	161,875
10	Arts-Voc. Ed.	12,744
12	Health Occup.	48,819
13	Home Econ/CHE	87,104
14	Legal Assist.	3,370
16	Library Assit.	622
19	Geology	185
21	Public Services	84,913
30	Personal Services	19,016
49	Voc. Ed. ESL	1
	Subtotal	909,788
99	Other, Voc. Ed.	63,299
	Total Voc. Ed.	973,087

Source: Chancellor's Office, California Community Colleges, Data Tapes for 6/13/85 VEA Enrollment; Course Classification Inventory File, 5/20/85; Compiled by Carvell Education Management Planning, Inc., 7/85.

Table 3-1
Original School Sample (N) and Response Rate(%) by School Size and Type

	Small		Medium		Large		Total	
	N	%	N	%	N	%	N	%
Business	7	57	12	83	13	54	32	66
Cosmetology	9	78	15	73	10	80	34	76
Computer	10	40	9	100	9	100	28	79
Health	8	7	9	89	10	60	27	78
Technical	24	88	24	83	16	69	64	81
Total	58	74	69	84	58	71	185	77

Table 3-2
School Size, by type of Proprietary School

	Small		Medium		Large		Total	
	%	N	%	N	%	N	%	N
Business	13	61	28	145	9	114	23	320
Cosmetology	13	63	25	130	26	104	21	297
Computer	5	24	5	24	9	34	6	82
Health	20	92	11	57	12	48	14	197
Technical	49	231	31	162	24	98	36	491
Total	100	471	100	518	100	398	100	1,387

Table 3-3
Accreditation Status, by School Type

	Accreditation Status			
	Accredited		Not Accredited	
	%	N	%	N
Business	39	126	61	194
Cosmetology	69	205	31	92
Computer	47	38	53	44
Health	37	73	63	124
Technical	18	87	83	404
Total	38	529	62	858

Table 3-4
Program Length, by School Type
(in hours)

	Average Length
Business	652
Cosmetology	824
Computer	641
Health	699
Technical	454

Table 3-5
New Starts, Continuing Students,
and Available Student Capacity, by School Type

	New Starts			Continuing Students		Available Capacity	
	N	Average	Total	Average	Total	Average	Total
Business	320	264	84,480	162	51,840	111	35,520
Cosmetology	297	290	86,130	125	37,125	42	12,474
Computer	82	329	26,978	163	13,366	120	9,840
Health	197	157	30,929	76	14,972	22	4,334
Technical	491	131	64,321	117	57,447	68	33,388
Total	1,387		292,838		174,750		95,556

Table 3-6
Perceived Chief Competitor, by School Type

	Other Props.		Community Colleges		Other		Total	
	%	N	%	N	%	N	%	N
Business	22	165	32	111	18	30	24	306
Cosmetology	23	173	16	57	26	42	21	272
Computer	5	38	6	22	9	14	6	73
Health	11	84	24	85	12	20	15	189
Technical	40	305	22	76	35	57	34	439
Total	100	765	100	351	100	163	100	1,279

Table 4-1

Vocational Education Enrollment
By System

System	Total Enrollments (1984)
Comprehensive Secondary Schools	863,071
ROCPs (secondary level)	125,225
Adult Schools (including ROCPs)	28,639*
Community Colleges	973,087**
Proprietary Schools	467,588***

*This figure was generated from CBEDS Vocational Education Data. It represents a "snapshot" of enrollment at a particular time, since adult education classes do not typically begin and end on a semester basis. Additional classes probably began after this count was taken. A total enrollment figure was not available from CBEDS sources.

**Based on 1983-84 figures.

***Based on a 1983 study of 1,387 schools.

END

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